COMPATIBILITY OF REFRIGERANTS AND LUBRICANTS WITH MOTOR MATERIALS

Effects of Refrigerant-Lubricant Exposures on Motor Materials
Volume III

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COMPATIBILITY OF REFRIGERANTS AND LUBRICANTS WITH MOTOR MATERIALS

Refrigerant-Lubricant Exposure Data Volume III

Because of the large scope of this project and the large amount of data recorded, the final report is divided into four volumes.

Volume III contains all the recorded measurements from the tests on the motor materials after exposure to the 17 refrigerant-lubricant combinations and to nitrogen at the same temperatures. The motor materials are identified by the codes listed on page iv. A letter coding system was used to identify the motor materials in the data tables. Data for each pure refrigerant-lubricant are listed in a separate appendix.

Volume I contains the abstract, scope, discussion of results, charts of motor material compatibility, test procedures, material identifications and 84 pages of data summary tables. This volume provides results of the study and other information of interest to most users of the information.

Volume II contains all the recorded measurements from the tests on the motor materials after exposures to the 11 pure refrigerants and to nitrogen at the same temperatures.

Volume IV contains the photographs of motor materials after exposures to pure refrigerants and to refrigerant-lubricant combinations.

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*All refrigerant-lubricant exposures and this nitrogen exposure were conducted at 127°C(260°F).

Code Chart For Motor Material Exposures

Magnet Wire

Code

- A -Modified polyester overcoated with polyamide imide, as described in Section MW 73 of NEMA Standard MW 1000.
- B -Modified polyester overcoated with polyamide imide and epoxy saturated glass as described in Section MW 73 and MW 46 of NEMA Standard MW 1000.
- C -Polyester imide over coated with polyamide imide.

Varnishes

Code

- A -U-475EH solvent epoxy
- B -Y-390PG solvent epoxy-phenolic
- C -ER-610 93% solids epoxy
- D -Y-833 100% solids VPI epoxy
- E -923 solvent epoxy
- F -Isopoxy 800 water-borne epoxy

Sheet Insulation, Slot Liners and Phase Separators

Code

- A -Nomex/Mylar/Nomex
- B -Dacron/Mylar/Dacron
- C -Mylar MO
- D -Nomex 410
- E -Nomex Mica 418
- F -Melinex 228

Spiral Wrapped Sleeving Insulation

Code

- A -Nomex
- B -Mylar
- C -Nomex/Mylar

Lead Wire Insulation

Code

- A -Dacron/Mylar/Dacron
- B -Dacron/Teflon/Mylar/Dacron

Tapes

Code

- A -Heat Cleaned Glass
- B -Heat Shrinkable Braided Polyester
- C -Permacel P247 glass/acrylic

Tie Cords

Code

- A-Polyester

#1-after 500 hour exposure to refrigerant or refrigerant/lubricant.
#2-after 500 hour exposure plus 24 hours at 127°C(302°F).

Units of Measure

Magnet Wire

<u>Test Performed</u>	<u>Experimental Units</u>
Weight Change	grams(g)
Burnout Strength	seconds(sec)
Dielectric Strength	Kilovolts(Kv)

Varnish

<u>Test Performed</u>	<u>Experimental Units</u>
Weight Change	grams(g)
Bond Strength	pounds(lbs)

Sheet Insulation

<u>Test Performed</u>	<u>Experimental Units</u>
Weight Change	grams(g)
Tensile Strength	1000 lbf per square inch(Ksi)
Elongation	inches
Dielectric Strength	Kilovolts(kV)

Spiral Wrapped Sleeving

<u>Test Performed</u>	<u>Experimental Units</u>
Weight Change	grams(g)

Lead Wire

<u>Test Performed</u>	<u>Experimental Units</u>
Weight Change	grams(g)
Dielectric Strength	Kilovolts(kV)

Tapes and Tie Cords

<u>Test Performed</u>	<u>Experimental Units</u>
Weight Change	grams(g)
Break Load Strength	pounds(lbs)
Elongation	inches

Abbreviations

WT=weight
EXP=exposed or experimental
BRN OUT=burnout
VIS=visual inspection
DIE=dielectric
VARN=varnish
BND STRENGTH=bond strength
COIL=helical coil
FLEX=flexibility test
N/C=no change

Appendix A

**Experimental Data for Nitrogen Exposure at
126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH

500 HRS IN Nitrogen at 260 F										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	21.1038	21.1050	0.006%	N/C	576	514		15.80	14.59	
					576	544	-5.3%	15.80	16.21	-2.5%
					576	578		15.80	lost	
B1	21.6679	21.6712	0.015%	N/C	736	723		11.62	11.01	
					736	688	-3.3%	11.62	10.60	-6.9%
					736	724		11.62	10.86	
C1	19.0279	19.0299	0.011%	N/C	579	612		16.58	10.97	
					579	601	4.8%	16.58	13.70	-21.4%
					579	608		16.58	14.44	
Nitrogen-->24 HRS @ 302 F										
A2	20.4637	20.4635	-0.001%	N/C	576	559		15.80	13.69	
					576	554	-3.2%	15.80	15.69	-5.2%
					576	559		15.80	15.54	
B2	22.2279	22.2298	0.009%	N/C	736	722		11.62	11.09	
					736	722	-1.9%	11.62	9.40	-8.1%
					736	722		11.62	11.53	
C2	19.2909	19.2911	0.001%	N/C	579	608		16.58	14.74	
					579	608	3.9%	16.58	11.58	-15.7%
					579	589		16.58	15.63	

TWISTED PAIRS/WIRE A WITH VARNISH

500 HOURS IN Nitrogen at 260 F											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MIDE IMIDE	U-475 A1	18.3479	18.3542	0.034%	N/C	16.24	6.67		430	435	
						16.24	5.54	-53.53%	430	443	3.80%
						16.24	10.43		430	461	
	Y-390 B1	23.1853	23.1794	-0.025%	N/C	18.77	6.06		510	700	
						18.77	12.30	-32.05%	510	597	11.76%
						18.77	19.90		510	413	
	ER-610 C1	20.7498	20.7519	0.010%	N/C	15.57	13.34		442	432	
						15.57	9.30	-19.14%	442	422	-4.07%
						15.57	15.13		442	418	
	Y-833 D1	18.6978	18.6996	0.010%	N/C	12.04	12.38		578	554	
						12.04	11.67	1.00%	578	557	-4.50%
						12.04	12.43		578	545	
	923 E1	21.4609	21.4605	-0.002%	N/C	16.76	12.16		606	549	
						16.76	5.43	-43.56%	606	548	-7.59%
						16.76	10.79		606	583	
	ISO-800 F1	18.7122	18.7124	0.001%	N/C	19.08	13.45		580	460	
						19.08	9.55	-34.07%	580	581	-11.72%
						19.08	14.74		580	495	
Nitrogen--> 24 hours at 302 F											
	U-475 A2	18.4726	18.4748	0.012%	N/C	16.24	3.85		430	456	
						16.24	12.43	-37.85%	430	562	15.43%
						16.24	14.00		430	471	
	Y-390 B2	21.2974	21.2950	-0.011%	N/C	18.77	11.97		510	653	
						18.77	16.21	-22.61%	510	624	17.84%
						18.77	15.40		510	526	
	ER-610 C2	20.4942	20.4948	0.003%	N/C	15.57	14.32		442	416	
						15.57	15.19	-9.89%	442	434	-5.51%
						15.57	12.58		442	403	
	Y-833 D2	19.6798	19.6809	0.006%	N/C	12.04	12.23		578	578	
						12.04	13.47	1.91%	578	561	-1.33%
						12.04	11.11		578	572	
	923 E2	21.6455	21.6440	-0.007%	N/C	16.76	12.17		606	608	
						16.76	15.71	-20.54%	606	577	-2.48%
						16.76	12.07		606	588	
	ISO-800 F2	18.3483	18.3439	-0.024%	N/C	19.08	14.53		580	572	
						19.08	7.69	-48.43%	580	543	-3.68%
						19.08	7.30		580	561	

TWISTED PAIRS/WIRE B/WITH VARNISH

500 HOURS IN Nitrogen at 260 F											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	22.8475	22.8512	0.02%	N/C	13.32	12.23		746	737	
						13.32	12.03	-8.93%	746	728	-1.79%
						13.32	12.13		746	733	
	Y-390 B1	21.4228	21.4243	0.01%	N/C	12.28	11.89		755	733	
						12.28	12.83	-2.85%	755	727	-3.09%
						12.28	11.07		755	735	
	ER-610 C1	21.8850	21.8880	0.01%	N/C	12.73	12.40		734	723	
						12.73	6.83	-4.87%	734	728	-1.04%
						12.73	11.82		734	728	
	Y-833 D1	20.0934	20.0956	0.01%	N/C	12.49	11.87		734	732	
						12.49	11.97	-6.00%	734	735	-0.36%
						12.49	11.38		734	727	
POLYAMIDE EPOXY GLASS	923 E1	23.6462	23.6453	0.00%	N/C	14.38	12.66		742	728	
						14.38	12.67	-14.74%	742	734	-1.44%
						14.38	11.45		742	732	
	ISO-800 F1	20.1280	20.1272	0.00%	N/C	12.29	11.94		747	734	
						12.29	12.37	-2.01%	747	729	-2.23%
						12.29	11.82		747	728	
	Nitrogen --> 24 hours @ 302 F										
	U-475 A2	23.0498	23.0463	-0.02%	N/C	13.32	11.61		746	723	
						13.32	12.40	-10.89%	746	723	-3.08%
						13.32	11.60		746	723	
	Y-390 B2	21.1739	21.1771	0.02%	N/C	12.28	9.60		755	723	
						12.28	10.78	-15.36%	755	722	-4.30%
						12.28	10.80		755	723	
	ER-610 C2	22.1851	22.1829	-0.01%	N/C	12.73	10.49		734	727	
						12.73	12.10	-9.87%	734	723	-1.14%
						12.73	11.83		734	727	
	Y-833 D2	20.1326	20.1315	-0.01%	N/C	12.49	10.15		734	723	
						12.49	9.89	-13.18%	734	723	-1.50%
						12.49	12.49		734	723	
GLASS	923 E2	23.3100	23.3045	-0.02%	N/C	14.38	12.10		742	723	
						14.38	11.52	-18.24%	742	723	-2.56%
						14.38	11.65		742	723	
	ISO-800 F2	22.6942	22.6919	-0.01%		12.29	9.60		747	723	
					N/C	12.29	10.49	-17.93%	747	723	-3.21%
						12.29	10.17		747	723	

TWISTED PAIRS/WIRE C/WITH VARNISH

500 HOURS IN Nitrogen at 260 F											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE	J-475 A1	21.5063	21.5128	0.030%	N/C	15.10	13.17		469	538	
						15.10	13.64	-16.40%	469	505	6.11%
						15.10	11.06		469	450	
	Y-390 B1	21.6169	21.6199	0.014%	N/C	18.24	12.18		473	613	
						18.24	4.87	-35.00%	473	480	14.45%
						18.24	18.52		473	531	
	ER-610 C1	20.4960	20.4982	0.011%	N/C	14.53	13.60		494	419	
						14.53	12.96	-16.27%	494	419	-11.94%
						14.53	9.94		494	467	
	Y-833 D1	19.7961	19.7990	0.015%	N/C	11.38	15.66		557	532	
						11.38	12.92	16.87%	557	485	-7.06%
						11.38	11.32		557	536	
	923 E1	20.6379	20.6362	-0.008%	N/C	15.85	6.57		503	475	
						15.85	3.50	-42.78%	503	551	7.82%
						15.85	17.14		503	601	
	ISO-800 F1	20.1979	20.1963	-0.008%	N/C	14.75	16.27		632	580	
						14.75	14.46	4.09%	632	596	-7.01%
						14.75	15.33		632	587	
	Nitrogen --> 24 hours @ 302 F										
	U-475 A2	20.1467	20.1455	-0.006%	N/C	15.10	12.33		469	436	
						15.10	15.90	-5.47%	469	366	-19.33%
						15.10	14.59		469	333	
	Y-390 B2	20.9674	20.9627	-0.022%	N/C	18.24	18.95		473	445	
						18.24	20.00	2.11%	473	469	-3.31%
						18.24	17.25		473	458	
	ER-610 C2	19.2992	19.2960	-0.017%	N/C	14.53	7.29		494	425	
						14.53	9.89	-45.61%	494	473	-10.53%
						14.53	6.53		494	428	
	Y-833 D2	20.7858	20.7872	0.007%	N/C	11.38	12.31		557	573	
						11.38	10.96	9.67%	557	474	-3.65%
						11.38	14.17		557	563	
	923 E2	17.3115	17.3100	-0.009%	N/C	15.85	10.63		503	487	
						15.85	11.14	-32.03%	503	473	-3.51%
						15.85	10.55		503	496	
	ISO-800 F2	20.5725	20.5725	0.000%	N/C	14.75	14.57		632	585	
						14.75	15.94	-1.31%	632	568	-9.49%
						14.75	13.16		632	563	

HELICAL COILS/WIRE A

500 HRS IN Nitrogen @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
P O L Y E S T E R	U-475 A1	39.0844	39.0930	0.022%	N/C	73.73	42.77	-29.92%
						73.73	53.55	
						73.73	58.70	
	Y-390 B1	37.2579	37.2601	0.006%	N/C	43.78	22.62	-42.83%
						43.78	25.00	
						43.78	27.47	
	ER-610 C1	38.6224	38.6296	0.019%	N/C	51.81	20.50	-36.61%
						51.81	42.27	
						51.81	35.75	
P O L Y A M I D E	Y-833 D1	37.4889	37.4958	0.018%	N/C	9.85	13.42	-5.79%
						9.85	11.42	
						9.85	3.00	
	923 E1	38.6194	38.6209	0.004%	N/C	41.28	25.55	-40.94%
						41.28	26.67	
						41.28	20.92	
	ISO-800 F1	36.8827	36.8844	0.005%	N/C	45.01	19.37	-59.71%
						45.01	16.90	
						45.01	21.95	
	Nitrogen 260 -> 24 HRS 302 F							
I M I D E	U-475 A2	39.5820	39.5825	0.001%	N/C	73.73	83.40	-8.28%
						73.73	61.60	
						73.73	73.65	
	Y-390 B2	38.2884	38.2846	-0.010%	N/C	43.78	32.57	-29.96%
						43.78	28.72	
						43.78	30.70	
	ER-610 C2	38.3307	38.3419	0.006%	N/C	51.81	49.17	-11.12%
						51.81	38.62	
						51.81	50.35	
Y-833 D2	36.9484	36.9531	0.013%	N/C	9.85	13.30	31.03%	
					9.85	14.12		
					9.85	11.30		
923 E2	36.5332	36.5323	-0.002%	N/C	41.28	25.50	-35.04%	
					41.28	26.30		
					41.28	28.65		
ISO-800 F2	37.6092	37.6105	0.003%	N/C	45.01	31.17	-28.37%	
					45.01	31.35		
					45.01	34.20		

HELICAL COILS/WIRE B

500 HRS IN Nitrogen at 260 F								
	VARN	COIL WT	Exp Coil wt	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE E IMIDE EP OX Y GL A S S	U-475 A1	36.8961	36.9066	0.028%	N/C	40.14	30.17	-30.31%
						40.14	25.15	
						40.14	28.60	
	Y-390 B1	36.2001	36.2051	0.014%	N/C	36.12	25.92	-11.11%
						36.12	32.60	
						36.12	37.80	
	ER-610 C1	35.5126	35.5150	0.007%	N/C	35.96	23.00	-36.76%
						35.96	23.90	
						35.96	21.32	
	Y-833 D1	36.9060	36.9192	0.036%	N/C	33.14	18.40	-43.45%
						33.14	20.37	
						33.14	17.45	
	923 E1	36.2460	36.2468	0.002%	N/C	40.52	33.52	-26.57%
						40.52	28.72	
						40.52	27.02	
	ISO-800 F1	35.4661	35.4717	0.016%	N/C	20.20	17.55	-12.51%
						20.20	15.65	
						20.20	19.82	
Nitrogen -> 24 HRS 302 F								
U-475 A2	37.7676	37.7712	0.010%	N/C	40.14	25.05	-35.54%	
					40.14	28.37		
					40.14	24.20		
Y-390 B2	36.1450	36.1451	0.000%	N/C	36.12	31.62	-10.95%	
					36.12	30.20		
					36.12	34.67		
ER-610 C2	36.9622	36.9600	-0.006%	N/C	35.96	23.77	-24.00%	
					35.96	32.70		
					35.96	25.52		
Y-833 D2	36.5969	36.6068	0.027%	N/C	33.14	19.52	-44.54%	
					33.14	18.15		
					33.14	17.47		
923 E2	36.3908	36.3862	-0.013%	N/C	40.52	36.60	-16.61%	
					40.52	36.12		
					40.52	28.65		
ISO-800 F2	36.3733	36.3742	0.002%	N/C	20.20	9.15	-25.74%	
					20.20	18.85		
					20.20	17.00		

HELICAL COILS/WIRE C

500 HRS IN Nitrogen at 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER IMIDE POLYAMIDE	U-475 A1	39.1167	39.1219	0.013%	N/C	51.21	21.37	-56.60%
						51.21	24.40	
						51.21	20.90	
	Y-390 B1	38.7438	38.7434	-0.001%	N/C	50.72	26.17	-50.97%
						50.72	27.02	
						50.72	21.42	
	ER-610 C1	37.3327	37.3372	0.012%	N/C	58.33	52.97	-24.26%
						58.33	44.42	
						58.33	35.15	
	Y-833 D1	37.1885	37.1953	0.018%	N/C	5.84	12.50	109.76%
						5.84	13.05	
						5.84	11.20	
	923 E1	38.3342	38.3357	0.004%	N/C	49.26	27.32	-49.90%
						49.26	26.80	
						49.26	19.92	
	ISO-800 F1	38.1312	38.1365	0.014%	N/C	36.08	23.52	-37.80%
						36.08	22.70	
						36.08	21.10	
Nitrogen -> 24 HRS 302 F								
POLYAMIDE IMIDE	U-475 A2	37.6244	37.6220	-0.006%	N/C	51.21	51.72	15.66%
						51.21	67.82	
						51.21	58.15	
	Y-390 B2	37.7500	37.7460	-0.011%	N/C	50.72	25.12	-45.64%
						50.72	29.32	
						50.72	28.27	
	ER-610 C2	37.1831	37.1786	-0.012%	N/C	58.33	69.85	3.70%
						58.33	51.25	
						58.33	60.37	
	Y-833 D2	37.7129	37.7155	0.007%	N/C	5.84	12.37	125.57%
						5.84	12.00	
						5.84	15.15	
	923 E2	38.7550	38.7490	-0.015%	N/C	49.26	29.25	-37.66%
						49.26	33.62	
						49.26	29.25	
	ISO-800 F2	37.7538	37.7515	-0.006%	N/C	36.08	47.67	11.87%
						36.08	24.50	
						36.08	48.92	

SINGLE MAG WIRE WITHOUT VARNISH

500 HRS IN Nitrogen @ 260 F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	5.3677	5.3693	0.030%	N/C	
					YES
B1	5.668	5.6693	0.023%	N/C	
					YES
C1	5.4165	5.4142	-0.042%	N/C	
					YES
Nitrogen -> 302F 24 HRS					
A2	4.9404	4.9381	-0.047%	N/C	
					YES
B2	5.4959	5.4938	-0.038%	N/C	
					YES
C2	5.9803	5.98	-0.005%	N/C	
					YES

SINGLE/WIRE A WITH VARNISH

500 hrs in Nitrogen at 260 F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE MIDE	U-475 A1	5.7063	5.7087	0.042%	N/C	
						NO
	Y-390 B1	6.2283	6.2272	-0.018%	N/C	
						NO
	ER-610 C1	5.8323	5.8332	0.015%	N/C	
						NO
	Y-833 D1	5.7952	5.7954	0.003%	N/C	
						YES-1
	923 E1	6.0210	6.0213	0.005%	N/C	
						NO
	ISO-800 F1	6.0178	6.0173	-0.008%	N/C	
						NO
	Nitrogen -> 24 HRS @ 302F					
	U-475 A2	5.9720	5.9709	-0.018%	N/C	
						NO
	Y-390 B2	5.9340	5.9308	-0.054%	N/C	
						NO
	ER-610 C2	5.6010	5.6007	-0.005%	N/C	
						NO
	Y-833 D2	5.6635	5.6618	-0.030%	N/C	
						YES-1
	923 E2	5.8101	5.8066	-0.060%	N/C	
						NO
	ISO-800 F2	5.1321	5.1299	-0.043%	N/C	
						NO

SINGLE WIRE B/WITH VARNISH

Nitrogen at 260 F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE EPOXY GLASS	U-475 A1	5.2256	5.2308	0.100%	N/C	
						NO
	Y-390 B1	5.9070	5.9070	0.000%	N/C	
						NO
	ER-610 C1	5.4778	5.4804	0.047%	N/C	
						YES
	Y-833 D1	5.7151	5.7163	0.021%	N/C	
						YES
	923 E1	6.0989	6.0992	0.005%	N/C	
						NO
	ISO-800 F1	5.7410	5.7418	0.014%	N/C	
						NO
Nitrogen -> 24 HRS @ 302F						
U-475 A2	5.5112	5.5135	0.042%	N/C		
					NO	
Y-390 B2	6.3449	6.3407	-0.066%	N/C		
					NO	
ER-610 C2	5.8962	5.9018	0.095%	N/C		
					YES	
Y-833 D2	5.8341	5.8338	-0.005%	N/C		
					YES	
923 E2	6.0289	6.0267	-0.036%	N/C		
					NO	
ISO-800 F2	6.1302	6.1276	-0.042%	N/C		
					NO	

SINGLE/WIRE C/WITH VARNISH

	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTERIMIDE POLYAMIDE	U-475 A1	5.0284	5.0313	0.058%	N/C	NO-1
	Y-390 B1	6.3666	6.3675	0.014%	N/C	NO
	ER-610 C1	5.9751	5.9758	0.012%	N/C	YES
	Y-833 D1	5.7851	5.7847	-0.007%	N/C	YES
	923 E1	5.8294	5.8287	-0.012%	N/C	NO
	ISO-800 F1	5.9614	5.9610	-0.007%	N/C	NO
	Nitrogen -> 24 HRS @ 302F					
	U-475 A2	5.0465	5.0456	-0.018%	N/C	YES
	Y-390 B2	5.5898	5.5860	-0.068%	N/C	NO
	ER-610 C2	5.9026	5.8957	-0.117%	N/C	NO
	Y-833 D2	5.4095	5.4060	-0.065%	N/C	YES
	923 E2	6.0001	5.9979	-0.037%	N/C	NO
	ISO-800 F2	5.5605	5.5583	-0.040%	N/C	NO

Varnish Disks

500 HRS IN Nitrogen @ 260 F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.8657	2.8203	-1.58%	N/C	N/C
Y-390 B1	2.3480	2.3132	1.48%	Slightly Warped	N/C
ER-610 C1	2.4281	2.4274	-0.03%	N/C	N/C
Y-833 D1	2.9013	2.9195	0.63%	N/C	N/C
923 E1	2.0774	2.0492	-1.36%	slightly warped	N/C
ISO-800 F1	2.0598	1.9941	-3.19%	Slightly Warped	N/C
Nitrogen 260F at ->302F 24 HRS					
U-475 A2	2.8981	2.8621	-1.24%	N/C	N/C
Y-390 B2	2.7299	2.6786	-1.88%	Slightly warped	N/C
ER-610 C2	2.3703	2.3588	-0.49%	Darkened	N/C
Y-833 D2	3.5321	3.5552	0.65%	N/C	N/C
923 E2	2.3378	2.3068	-1.33%	slightly Warped	N/C
ISO-800 F2	2.1550	2.0885	-3.09%	Slightly warped	N/C

SHEET INSULATION---Nitrogen @ 260°F(127°C)

500 HR IN NITROGEN @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	8.2896	8.2953	0.07%	0.490	92.05	21	17.4	8.95	
				0.355	64.20	21	17.4	8.61	-49.55%
				0.378	133.00	21	17.4	16.75	
DA/MY/DA B1	7.6508	7.6543	0.05%	0.495	125.70	22	13.7	11.54	
				0.470	127.80	22	13.7	12.36	-8.56%
				0.377	105.30	22	13.7	12.70	
MYLAR MO C1	3.7184	3.7225	0.11%	0.394	64.10	10	21.7	16.27	
				0.475	79.10	10	21.7	16.65	-24.04%
				0.428	70.75	10	21.7	16.53	
NO 410 D1	3.4136	3.4211	0.22%	0.424	82.50	11	18.7	17.69	
				0.481	97.20	11	18.7	18.37	-8.95%
				0.515	85.10	11	18.7	15.02	
NO MI 418 E1	3.6602	3.6698	0.26%	0.488	30.95	9	7.5	7.05	
				0.482	30.95	9	7.5	7.13	-5.86%
				0.515	32.45	9	7.5	7.00	
MEL 228 F1	4.3084	4.3130	0.11%	0.475	82.60	10	21.7	17.39	
				0.475	80.90	10	21.7	17.03	-21.53%
				0.491	81.80	10	21.7	16.66	
500 HRS IN NITROGEN @ 260 F -> 24 HRS @ 302 F									
NO/MY/NO A2	7.5739	7.6150	0.54%	0.409	144.40	23	17.4	15.35	
				0.363	129.30	23	17.4	15.49	-12.59%
				0.430	146.30	23	17.4	14.79	
DA/MY/DA B2	7.8608	7.8626	0.02%	0.430	120.80	22	13.7	12.77	
				0.450	127.30	22	13.7	12.86	-11.41%
				0.460	109.10	22	13.7	10.78	
MYLAR MO C2	4.1170	4.1232	0.15%	0.477	79.55	10	21.7	16.68	
				0.492	83.10	10	21.7	16.89	-24.40%
				0.462	72.30	10	21.7	15.65	
NOMEX 410 D2	3.6320	3.6848	1.45%	0.443	81.05	11	18.7	16.63	
				0.509	109.90	11	18.7	19.63	-4.04%
				0.491	94.90	11	18.7	17.57	
NO/MI 418 E2	3.8369	3.8656	0.75%	0.485	28.90	10	7.5	5.96	
				0.502	30.20	10	7.5	6.02	-19.71%
				0.518	31.55	10	7.5	6.09	
MEL 228 F2	4.3790	4.3845	0.13%	0.491	86.05	11	21.7	15.93	
				0.524	91.00	11	21.7	15.79	-30.19%
				0.411	62.05	11	21.7	13.72	

SHEET INSULATION---Nitrogen @ 260°F(127°C)

500 hour in Nitrogen @ 260°F(127°C)								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A1	0.10	2.5%	20.0%		>18.97	flash		N/C
	0.10	2.5%	20.0%	-87.5%	>18.97	flash	flash	
	0.52	13.0%	20.0%		>18.97	flash		
DA/MY/DA B1	0.42	21.0%	46.0%		>15.27	flash		slightly warped yellowed
	0.46	23.0%	46.0%	-50.0%	>15.27	flash	flash	
	0.42	21.0%	46.0%		>15.27	flash		
MYLAR MO C1	0.12	6.0%	131.0%		>14.91	flash		N/C
	0.14	7.0%	131.0%	-95.0%	>14.91	flash	flash	
	0.13	6.5%	131.0%		>14.91	flash		
NO 410 D1	0.41	10.3%	17.0%		10.67	9.81		N/C
	0.51	12.8%	17.0%	-43.6%	10.67	10.41	-5.6%	
	0.23	5.8%	17.0%		10.67	9.99		
NO MI 418 E1	0.05	1.3%	4.0%		10.23	9.33		N/C
	0.05	1.3%	4.0%	-70.8%	10.23	9.87	-6.3%	
	0.04	1.0%	4.0%		10.23	9.57		
MEL 228 F1	0.13	6.5%	160.0%		>14.22	flash		N/C
	0.13	6.5%	160.0%	-96.4%	>14.22	flash	flash	
	0.10	5.0%	160.0%		>14.22	flash		
After 500 hour exposure plus a 24 hour airbake at 150°C(302°F)								
NO/MY/NO A2	0.34	8.5%	20.0%		>18.97	flash		N/C
	0.25	6.3%	20.0%	-66.7%	>18.97	flash	flash	
	0.21	5.3%	20.0%		>18.97	flash		
DA/MY/DA B2	0.49	24.5%	46.0%		>15.27	flash		Slightly warped
	0.50	25.0%	46.0%	-54.3%	>15.27	flash	flash	
	0.42	21.0%	46.0%		>15.27	flash		
MYLAR MO C2	0.13	6.5%	131.0%		>14.91	flash		N/C
	0.13	6.5%	131.0%	-95.4%	>14.91	flash	flash	
	0.11	5.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.19	4.8%	17.0%		10.67	11.15		N/C
	0.27	6.8%	17.0%	-54.4%	10.67	10.89	-1.8%	
	0.47	11.8%	17.0%		10.67	9.40		
NO/MI 418 E2	0.05	1.3%	4.0%		10.23	9.52		N/C
	0.05	1.3%	4.0%	-68.8%	10.23	9.83	-4.6%	
	0.05	1.3%	4.0%		10.23	9.94		
MEL 228 F2	0.11	5.5%	160.0%		>14.22	flash		N/C
	0.13	6.5%	160.0%	-96.8%	>14.22	flash	flash	
	0.07	3.5%	160.0%		>14.22	flash		

SLEEVING

500 HRS IN Nitrogen @ 260F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5426	0.5441	0.28%	Discolored see Photo
B1 MYLAR	0.5060	0.5057	-0.06%	Brittle See Photo
C1 NOMY	0.3959	0.3963	0.10%	Outside Brittle see photo
Nitrogen @ 260F---->24 hrs @ 302F				
A2 NOMEX	0.5492	0.5449	-0.78%	Color lightened see Photos
B2 MYLAR	0.5190	0.5142	-0.92%	Darkened Brittle *see photo
C2 NOMY	0.4021	0.3981	-0.99%	Darkened Brittle *see photo

TAPE---Nitrogen @ 127°C(260°F)

500 HRS IN NITROGEN @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.7369	1.7300	-0.40%	39.02	43.40		0.04	2.00%	N/C
				39.02	48.55	5.42%	0.04	2.00%	
				39.02	31.45		0.04	2.00%	
B1 Polyester	0.7091	0.7096	0.07%	56.12	43.50		0.30	15.00%	N/C
				56.12	38.10	27.30%	0.24	12.00%	
				56.12	LOST		LOST	lost	
C1 Permacel	1.6459	1.6376	-0.50%	88.50	91.45		0.09	4.50%	
				88.50	87.55	6.48%	0.08	4.00%	
				88.50	103.70		0.08	4.00%	
500 HRS in NITROGEN -> 302 F 24 HRS									
A2 Glass	1.4994	1.4958	-0.24%	39.02	46.00		0.04	2.00%	N/C
				39.02	55.70	14.77%	0.07	3.50%	
				39.02	32.65		0.04	2.00%	
B2 Polyester	0.6781	0.6782	0.01%	56.12	41.50		0.29	14.50%	N/C
				56.12	37.10	-29.14%	0.39	19.50%	
				56.12	40.70		0.32	16.00%	
C2 Permacel	1.6451	1.5769	-4.15%	88.50	58.55		0.05	2.50%	Darkened
				88.50	109.10	-11.41%	0.10	5.00%	
				88.50	67.55		0.05	2.50%	

TIE CORDS

500 HRS IN NITROGEN @ 260 F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2617	0.2611	-0.23%	N/C	28.36	25.05		0.31	15.5%
					28.36	25.10	-11.14%	0.34	17.0%
					28.36	25.45		0.36	18.0%
500 HRS IN NITROGEN -> 24 HRS @ 302F									
A2	0.2853	0.2852	-0.035%	N/C	28.36	29.10		0.35	17.5%
					28.36	29.55	0.49%	0.34	17.0%
					28.36	26.85		0.36	18.0%

LEAD WIRE INSULATION

500 HRS IN Nitrogen @ 260 F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.0361	4.0362	0.00%	N/C	9.61	10.37	
A1					9.61	9.64	3.02%
					9.61	9.69	
DTMD	4.2147	4.2147	0.00%	N/C	9.95	10.67	
B1					9.95	7.89	-12.23%
					9.95	7.64	
Nitrogen @ 260 F -> 24 HRS @ 302F							
DMD	4.0556	4.0556	0.00%		9.61	8.85	
A2					9.61	8.90	-9.05%
					9.61	8.47	
DTMD	4.2947	4.2929	-0.04%		9.95	9.23	
B2					9.95	9.99	-7.91%
					9.95	8.27	

Appendix B

**Experimental Data for HCFC-22/Witco 3GS
Exposure at 126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HCFC-22/Suniso 3GS oil @260°F(127°C)

500 hours in HCFC-22/Suniso 3GS oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	23.5135	23.5370	0.100%	N/C	576	437		15.80	15.43	
					576	378	-31.1%	15.80	16.69	-5.4%
					576	375		15.80	12.70	
B1	24.007	24.1007	0.390%	N/C	736	731		11.62	12.89	
					736	728	-0.9%	11.62	12.94	13.3%
					736	730		11.62	13.67	
C1	22.7081	22.7271	0.084%	N/C	579	348		16.58	17.90	
					579	393	-37.2%	16.58	17.90	6.4%
					579	350		16.58	17.10	
500 hours in HCFC-22/Suniso 3GS oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	22.2825	22.2815	-0.004%	N/C	576	477		15.80	16.33	
					576	546	-14.4%	15.80	15.32	-11.0%
					576	456		15.80	10.54	
B2	24.0035	24.0226	0.080%	N/C	736	730		11.62	11.69	
					736	727	-1.0%	11.62	11.81	0.2%
					736	730		11.62	11.42	
C2	22.8864	22.8891	0.012%	N/C	579	449		16.58	17.63	
					579	483	-19.0%	16.58	16.88	-9.1%
					579	475		16.58	10.69	

TWISTED PAIRS/WIRE A/WITH VARNISH-HCFC-22/Suniso 3GS oil @260°F(127°C)

500 hours in HCFC-22/Suniso 3GS oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE IMIDE	U-475 A1	22.5250	22.6049	0.355%	N/C	16.24	13.81		430	325	
						16.24	17.43	-11.45%	430	332	-20.78%
						16.24	11.90		430	365	
	Y-390 B1	22.2260	22.3107	0.381%	N/C	18.77	16.10		510	391	
						18.77	12.74	-13.27%	510	399	-22.48%
						18.77	20.00		510	396	
	ER-610 C1	22.4122	22.4600	0.213%	N/C	15.57	13.51		442	270	
						15.57	16.62	-2.72%	442	292	-37.93%
						15.57	15.31		442	261	
	Y-833 D1	20.9834	20.9936	0.049%	N/C	12.04	11.23		578	414	
						12.04	11.15	0.19%	578	370	-33.22%
						12.04	13.81		578	374	
	923 E1	23.1388	23.2430	0.450%	N/C	16.76	12.46		606	391	
						16.76	7.37	-49.90%	606	389	-35.64%
						16.76	5.36		606	*broke	
	ISO-800 F1	21.5467	21.5929	0.214%	N/C	19.08	17.17		580	388	
						19.08	15.82	-13.56%	580	393	-33.68%
						19.08	16.49		580	373	
	500 hours in HCFC-22/Suniso 3GS oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)										
	U-475 A2	21.9872	21.9968	0.044%	N/C	16.24	16.37		430	283	
						16.24	15.52	-4.89%	430	242	-41.24%
						16.24	14.45		430	233	
	Y-390 B2	22.1704	22.1910	0.093%	N/C	18.77	15.87		510	500	
						18.77	19.85	-8.22%	510	392	-15.69%
						18.77	15.96		510	398	
	ER-610 C2	22.7480	22.7555	0.033%	N/C	15.57	13.39		442	341	
						15.57	15.02	-11.56%	442	315	-27.15%
						15.57	12.90		442	310	
	Y-833 D2	21.2636	21.2466	-0.080%	N/C	12.04	12.06		578	380	
						12.04	11.64	-0.94%	578	382	-32.87%
						12.04	12.08		578	402	
	923 E2	22.8186	22.8406	0.096%	N/C	16.76	12.82		606	550	
						16.76	10.99	-28.97%	606	404	-25.80%
						16.76	broke		606	395	
	ISO-800 F2	21.6972	21.7068	0.044%	N/C	19.08	14.63		580	290	
						19.08	17.20	-22.10%	580	262	-51.84%
						19.08	12.76		580	286	

TWISTED PAIRS/WIRE B/WITH VARNISH -HCFC-22/Suniso 3GS oil @260°F(127°C)

500 HOURS in HCFC-22/Suniso 3GS oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MID E I M I D E E P O X Y G L A S S	U-475 A1	23.0347	23.1445	0.48%	N/C	13.32	15.41		746	730	
						13.32	13.35	11.01%	746	731	-2.19%
						13.32	15.60		746	728	
	Y-390 B1	22.6816	22.8481	0.73%	N/C	12.28	13.27		755	732	
						12.28	14.59	1.25%	755	742	-2.30%
						12.28	9.44		755	739	
	ER-610 C1	22.3401	22.4135	0.33%	N/C	12.73	13.21		734	733	
						12.73	13.80	5.24%	734	733	-0.36%
						12.73	13.18		734	728	
	Y-833 D1	21.8444	21.8891	0.20%	N/C	12.49	12.76		734	728	
						12.49	11.90	0.56%	734	730	-0.45%
						12.49	13.02		734	734	
	923 E1	23.7071	23.8429	0.57%	N/C	14.38	7.85		742	735	
						14.38	13.67	-25.68%	742	731	-1.21%
						14.38	10.54		742	733	
	ISO-800 F1	23.3799	23.4602	0.34%	N/C	12.29	12.43		747	744	
						12.29	15.30	15.95%	747	745	-0.67%
						12.29	15.02		747	737	
500 HOURS in HCFC-22/Suniso 3GS oil @ 260°F(127°C) plus 24 hours @ 302°F(150											
	U-475 A2	22.1985	22.2014	0.01%	N/C	13.32	12.03		746	744	
						13.32	10.14	-17.64%	746	740	-0.45%
						13.32	10.74		746	744	
	Y-390 B2	23.6219	23.6439	0.09%	N/C	12.28	10.41		755	727	
						12.28	12.49	-5.35%	755	729	-3.58%
						12.28	11.97		755	753	
	ER-610 C2	23.4576	23.4639	0.03%	N/C	12.73	10.93		734	730	
						12.73	11.33	-11.18%	734	711	-1.54%
						12.73	11.66		734	727	
	Y-833 D2	22.2836	22.2725	-0.05%	N/C	12.49	11.05		734	670	
						12.49	11.00	-14.04%	734	624	-24.02%
						12.49	10.16		734	379	
	923 E2	22.6937	22.7272	0.15%	N/C	14.38	12.30		742	729	
						14.38	12.40	-12.40%	742	730	-1.75%
						14.38	13.09		742	730	
	ISO-800 F2	23.6132	23.6262	0.06%		12.29	10.81		747	743	
					N/C	12.29	12.83	-4.01%	747	735	-1.07%
						12.29	11.75		747	broke	

TWISTED PAIRS/WIRE C/WITH VARNISH-HCFC-22/Suniso 3GS @ 260°F(127°C)

500 Hours in HCFC-22/Suniso 3GS @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER IMIDE POLYAMIDE	U-475 A1	22.7400	22.7477	0.034%	N/C	15.10	12.20		469	268	
						15.10	10.63	-27.15%	469	262	-40.80%
						15.10	10.17		469	303	
	Y-390 B1	24.6856	24.7782	0.375%	N/C	18.24	20.00		473	384	
						18.24	20.00	9.65%	473	398	-17.05%
						18.24	20.00		473	395	
	ER-610 C1	21.4750	21.5082	0.155%	N/C	14.53	16.59		494	314	
						14.53	18.10	25.46%	494	321	-37.72%
						14.53	20.00		494	288	
	Y-833 D1	22.4930	22.5718	0.350%	N/C	11.38	16.29		557	329	
						11.38	10.49	25.60%	557	278	-43.99%
						11.38	16.10		557	329	
	923 E1	23.0783	23.1746	0.417%	N/C	15.85	20.00		503	328	
						15.85	13.76	6.50%	503	392	-26.24%
						15.85	broke		503	393	
	ISO-800 F1	21.7956	21.8324	0.169%	N/C	14.75	11.07		632	294	
						14.75	15.58	-7.39%	632	315	-49.68%
						14.75	14.33		632	345	
500 Hours in HCFC-22/Suniso 3GS @ 260°F(127°F) plus 24 hours @ 302°F(150°C)											
U-475 A2	23.1066	23.0999	-0.029%	N/C	15.10	10.34		469	296		
					15.10	11.37	-21.50%	469	330	-33.62%	
					15.10	13.85		469	308		
Y-390 B2	23.8392	23.8607	0.090%	N/C	18.24	15.14		473	387		
					18.24	16.31	-12.55%	473	386	-17.69%	
					18.24	15.59		473	395		
ER-610 C2	21.3429	21.3480	0.024%	N/C	14.53	12.76		494	322		
					14.53	16.29	0.76%	494	367	-29.28%	
					14.53	14.87		494	359		
Y-833 D2	22.9811	22.9907	0.042%	N/C	11.38	9.22		557	219		
					11.38	11.48	5.07%	557	270	-55.30%	
					11.38	15.17		557	258		
923 E2	23.2954	23.3268	0.135%	N/C	15.85	16.61		503	390		
					15.85	16.00	5.26%	503	416	-26.11%	
					15.85	17.44		503	309		
ISO-800 F2	21.9080	21.9139	0.027%	N/C	14.75	17.70		632	219		
					14.75	18.46	12.70%	632	244	-60.28%	
					14.75	13.71		632	290		

HELICAL COILS/WIRE A---HCFC-22/Suniso 3GS oil @260°F(127°C)

500 HRS in HCFC-22/Suniso 3GS @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER	U-475 A1	41.0525	41.2022	0.365%	N/C	73.73	49.42	-23.80%
						73.73	54.65	
						73.73	64.47	
	Y-390 B1	39.4321	39.5692	0.348%	N/C	43.78	32.92	-10.19%
						43.78	46.82	
						43.78	38.22	
	ER-610 C1	39.0481	39.1413	0.239%	N/C	51.81	34.32	-23.06%
						51.81	43.82	
						51.81	41.45	
	Y-833 D1	38.6445	38.6408	-0.010%	N/C	9.85	32.10	184.84%
						9.85	13.57	
						9.85	38.50	
923 E1	39.2692	39.3659	0.246%	N/C	41.28	23.97	-24.81%	
					41.28	32.52		
					41.28	36.62		
ISO-800 F1	36.9637	37.0400	0.206%	N/C	45.01	43.05	-7.35%	
					45.01	40.35		
					45.01	31.17		
500 HRS in HCFC-22/Suniso 3GS @ 260 F -> 24 HRS 302°F								
IMIDE	U-475 A2	39.6806	39.7234	0.108%	N/C	73.73	64.12	-21.15%
						73.73	52.17	
						73.73	64.10	
	Y-390 B2	40.3439	40.3747	0.076%	N/C	43.78	47.60	7.48%
						43.78	47.05	
						43.78	46.52	
	ER-610 C2	38.6218	38.6486	0.069%	N/C	51.81	60.17	-0.69%
						51.81	46.52	
						51.81	47.67	
	Y-833 D2	37.9890	37.9597	-0.077%	N/C	9.85	15.40	199.15%
						9.85	51.55	
						9.85	21.45	
923 E2	38.7953	38.8390	0.113%	N/C	41.28	51.25	4.47%	
					41.28	46.95		
					41.28	31.17		
ISO-800 F2	36.5587	36.5737	0.041%	N/C	45.01	45.15	3.13%	
					45.01	40.90		
					45.01	53.20		

HELICAL COILS/WIRE B-HCFC-22/Suniso 3GS Oil

	500 HRS in HCFC-22/Suniso 3GS @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER	U-475 A1	36.8559	37.0016	0.395%	N/C	40.14	35.80	-19.56%
						40.14	29.35	
						40.14	31.72	
POLYESTER	Y-390 B1	37.5749	37.7172	0.379%	N/C	36.12	31.90	-3.77%
						36.12	33.30	
						36.12	39.07	
POLYESTER	ER-610 C1	37.3486	37.4558	0.287%	N/C	35.96	29.97	-27.63%
						35.96	24.85	
						35.96	23.25	
POLYESTER	Y-833 D1	36.5613	36.6108	0.135%	N/C	33.14	*0	-45.68%
						33.14	13.95	
						33.14	22.05	
POLYAMIDE	923 E1	37.4040	37.5504	0.391%	N/C	40.52	33.70	-8.48%
						40.52	41.10	
						40.52	36.45	
POLYAMIDE	ISO-800 F1	37.8000	37.9542	0.408%	N/C	20.20	20.27	10.30%
						20.20	23.92	
						20.20	22.65	
	500 HRS in HCFC-22/Suniso 3GS @ 260 F -> 24 HRS 302°F							
POLYIMIDE	U-475 A2	37.3501	37.4024	0.140%	N/C	40.14	36.45	-16.98%
						40.14	31.97	
						40.14	31.55	
POLYIMIDE	Y-390 B2	37.4044	37.4715	0.179%	N/C	36.12	33.07	-6.51%
						36.12	36.52	
						36.12	31.72	
POLYIMIDE	ER-610 C2	37.2550	37.2858	0.083%	N/C	35.96	26.87	-21.38%
						35.96	25.72	
						35.96	32.22	
POLYIMIDE	Y-833 D2	36.0501	36.0642	0.039%	N/C	33.14	15.70	-51.20%
						33.14	17.45	
						33.14	15.37	
POLYGLASS	923 E2	38.4349	38.4687	0.088%	N/C	40.52	33.67	-20.99%
						40.52	33.82	
						40.52	28.55	
POLYGLASS	ISO-800 F2	36.4318	36.4546	0.063%	N/C	20.20	19.72	-6.57%
						20.20	19.10	
						20.20	17.80	

HELICAL COILS/WIRE C-HCFC-22/Suniso 3GS oil @ 260°F(127°C)

500 HRS in HCFC-22/Suniso 3GS @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTERIMIDE	U-475 A1	38.2589	38.3714	0.294%	N/C	51.21	34.15	-0.56%
						51.21	53.47	
						51.21	65.15	
	Y-390 B1	40.4622	40.5865	0.307%	N/C	50.72	31.32	-46.31%
						50.72	21.52	
						50.72	28.85	
	ER-610 C1	37.9586	38.0611	0.270%	N/C	58.33	35.17	-38.80%
						58.33	45.55	
						58.33	26.37	
	Y-833 D1	38.5142	38.4504	-0.166%	N/C	5.84	26.82	201.43%
						5.84	11.67	
						5.84	14.32	
	923 E1	40.0764	40.1945	0.295%	N/C	49.26	21.70	-49.72%
						49.26	28.00	
						49.26	24.60	
	ISO-800 F1	39.7549	39.8407	0.216%	N/C	36.08	27.45	-22.45%
						36.08	26.37	
						36.08	30.12	
500 HRS in HCFC-22/Suniso 3GS @ 260 F-> 24 HRS 302°F								
U-475 A2	38.4290	38.4736	0.116%	N/C	51.21	37.50	-1.50%	
					51.21	48.12		
					51.21	65.70		
Y-390 B2	40.2394	40.2752	0.089%	N/C	50.72	42.42	-15.41%	
					50.72	43.47		
					50.72	42.82		
ER-610 C2	38.4972	38.5286	0.082%	N/C	58.33	54.47	-23.58%	
					58.33	45.95		
					58.33	33.30		
Y-833 D2	38.1386	37.9934	-0.381%	N/C	5.84	20.67	192.01%	
					5.84	13.42		
					5.84	17.07		
923 E2	40.0668	40.1228	0.140%	N/C	49.26	41.02	-17.99%	
					49.26	39.57		
					49.26	40.60		
ISO-800 F2	39.6967	39.7145	0.045%	N/C	36.08	47.52	-0.86%	
					36.08	27.27		
					36.08	32.52		

SINGLE MAG WIRE WITHOUT VARNISH-HCFC-22/Suniso 3GS @ 260°F(127°C))

500 HRS in HCFC-22/Suniso 3GS oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	4.2337	4.2342	0.012%	N/C	
					YES
B1	6.1389	6.1643	0.414%	N/C	
					YES
C1	5.5328	5.5383	0.099%	N/C	
					YES
500 HRS in HCFC-22/Suniso 3GS-> 302°F for 24 HRS					
A2	4.2951	4.2928	-0.054%	N/C	
					YES
B2	6.1086	6.1197	0.182%	N/C	
					YES
C2	5.6362	5.6371	0.016%	N/C	
					YES

SINGLE/WIRE A/WITH VARNISH--HCFC-22/Suniso 3GS oil 260°F(127°C)

S in HCFC-22/Suniso 3GS oil @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE	U-475 A1	5.3764	5.3925	0.299%	N/C	NO
	Y-390 B1	5.5485	5.5750	0.478%	N/C	NO
	ER-610 C1	5.2200	5.2275	0.144%	N/C	YES
	Y-833 D1	5.8662	5.8716	0.092%	N/C	YES
	923 E1	3.9176	3.9360	0.470%	N/C	NO
	ISO-800 F1	5.3733	5.3840	0.199%	N/C	NO
	HCFC-22/Suniso 3GS -> 24 HRS @ 302°F					
	U-475 A2	5.3685	5.3684	-0.002%	N/C	YES
	Y-390 B2	5.5048	5.5127	0.144%	N/C	NO
	ER-610 C2	5.1742	5.1743	0.002%	N/C	YES
	Y-833 D2	5.9649	5.9674	0.042%	N/C	YES
	923 E2	5.6457	5.6515	0.103%	N/C	NO
	ISO-800 F2	5.4523	5.4543	0.037%	N/C	NO

		500 HRS in HCFC-22/Suniso 3GS oil @ 260°F(127°C)					
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX	
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	5.4995	5.5191	0.356%	N/C		
						NO	
	Y-390 B1	5.8081	5.8414	0.573%	N/C		
						NO	
	ER-610 C1	5.4412	5.4533	0.222%	N/C		
						YES	
	Y-833 D1	5.6020	5.6167	0.262%	N/C		
						YES	
	923 E1	5.5039	5.5485	0.810%	N/C		
						NO	
ISO-800 F1	5.4714	5.4866	0.278%	N/C			
					NO		
	HCFC-22/Suniso 3GS @ 260°F(127°C)						
U-475 A2	5.6013	5.6000	-0.023%	N/C			
					NO		
Y-390 B2	5.7672	5.7729	0.099%	N/C			
					NO		
ER-610 C2	5.5532	5.5561	0.052%	N/C			
					NO		
Y-833 D2	5.6848	5.6895	0.083%	N/C			
					YES		
923 E2	5.5288	5.5444	0.282%	N/C			
					NO		
ISO-800 F2	5.5583	5.5619	0.065%	N/C			
					NO		

SINGLE/WIRE C/WITH VARNISH--HCFC-22/Suniso 3GS @ 260°F(127°C)

500 HRS in HCFC-22/Suniso 3GS oil @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
P O L Y E S T E R I M I D E P O L Y A M I D E	U-475 A1	5.4211	5.4352	0.260%	N/C	Yes
	Y-390 B1	5.3374	5.3630	0.480%	N/C	NO
	ER-610 C1	5.4686	5.4762	0.139%	N/C	YES
	Y-833 D1	5.1091	5.1152	0.119%	N/C	YES
	923 E1	5.7650	5.7934	0.493%	N/C	NO
	ISO-800 F1	5.3531	5.3625	0.176%	N/C	NO
	HCFC-22/Suniso 3GS @ 260°F(127°C) -> 24 HRS @ 30					
	U-475 A2	5.5452	5.5488	0.065%	N/C	NO
	Y-390 B2	5.3785	5.3852	0.125%	N/C	NO
	ER-610 C2	5.4199	5.4237	0.070%	N/C	YES
	Y-833 D2	5.0625	5.0630	0.010%	N/C	NO
	923 E2	5.6475	5.6552	0.136%	N/C	NO
	ISO-800 F2	5.3214	5.3257	0.081%	N/C	NO

Varnish Disks----HCFC-22/Suniso 3GS Oil

500 HRS IN R-22/Suniso 3Gs @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.2186	2.3196	4.55%	N/C	N/C
Y-390 B1	2.0067	2.1010	4.70%	slightly warped	N/C
ER-610 C1	1.9738	2.0926	6.02%	N/C	N/C
Y-833 D1	2.1735	2.2576	3.87%	N/C	N/C
923 E1	1.5719	1.5816	0.62%	N/C	N/C
ISO-800 F1	1.6531	1.6038	-2.98%	warped	N/C
R22/Suniso 3GS at --->24 hour at 302°F.					
U-475 A2	1.9055	1.9181	0.66%	darkened	N/C
Y-390 B2	1.9896	1.9580	-1.59%	slightly warped	N/C
ER-610 C2	2.4213	2.4799	2.42%	darkened	N/C
Y-833 D2	2.5593	2.5927	1.31%	N/C	N/C
923 E2	1.5617	1.5363	-1.63%	N/C	N/C
ISO-800 F2	1.4199	1.3553	-4.55%	very warped	N/C

SHEET INSULATION-HCFC-22/Suniso 3GS oil @ 260°F(127°C)

500 HRS in HCFC-22/Suniso 3GS @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	4.8759	5.4523	11.82%	0.335	53.45	21	17.4	7.60	
				0.376	62.27	21	17.4	7.89	-54.64%
				0.496	85.37	21	17.4	8.20	
DA/MY/DA B1	4.1338	4.2629	3.12%	0.398	14.00	21	13.7	1.68	
				0.385	14.00	21	13.7	1.73	-88.16%
				0.429	13.15	21	13.7	1.46	
MYLAR MO C1	2.2119	2.2635	2.33%	0.390	0.00	10	21.7	0.00	
				0.450	0.00	10	21.7	0.00	-100.00%
				0.429	0.00	10	21.7	0.00	
NO 410 D1	2.2203	2.5243	13.69%	0.456	76.20	10	18.7	16.71	
				0.430	77.52	10	18.7	18.03	-5.47%
				0.495	90.55	10	18.7	18.29	
NO MI 418 E1	2.3705	2.9645	25.06%	0.485	28.62	10	7.5	5.90	
				0.501	29.10	10	7.5	5.81	-20.74%
				0.489	29.95	10	7.5	6.12	
MEL 228 F1	2.4124	2.5093	4.02%	0.498	0.00	10	21.7	0.00	
				0.438	0.00	10	21.7	0.00	-100.00%
				0.487	0.00	10	21.7	0.00	
500 HRS in HCFC-22/Suniso 3GS @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	4.3581	4.5743	4.96%	0.560	21.05	21	17.4	1.79	
				0.480	82.05	21	17.4	8.14	-69.86%
				0.512	62.40	21	17.4	5.80	
DA/MY/DA B2	4.3440	4.3395	-0.10%	0.332	12.00	21	13.7	1.72	
				0.415	18.00	21	13.7	2.07	-85.61%
				0.398	17.80	21	13.7	2.13	
MYLAR MO C2	2.2041	2.2105	0.29%	0.401	0.00	10	21.7	0.00	
				0.405	0.00	10	21.7	0.00	-100.00%
				0.418	0.00	10	21.7	0.00	
NOMEX 410 D2	2.0491	2.1781	6.30%	0.505	94.02	10	18.7	18.62	
				0.509	94.32	10	18.7	18.53	0.52%
				0.468	90.05	10	18.7	19.24	
NO/MI 418 E2	2.6279	2.9851	13.59%	0.509	28.60	10	7.5	5.62	
				0.502	26.90	10	7.5	5.36	-27.13%
				0.502	27.20	10	7.5	5.42	
MEL 228 F2	2.2579	2.3071	2.18%	0.448	0.00	10	21.7	0.00	
				0.475	0.00	10	21.7	0.00	-100.00%
				0.468	0.00	10	21.7	0.00	

500 HREAfter 500 hour exposure to Nitrogen								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A1	0.14	3.5%	20.0%		>18.97	>18.88		Mylar brittle discolored yellowed
	0.19	4.8%	20.0%	-79.4%	>18.97	>18.13	flash	
	0.17	4.3%	20.0%		>18.97	>18.35		
DA/MY/DA B1	0.00	0.0%	46.0%		>15.27	>12.71		Mylar Brittle Dielectric went through crack
	0.00	0.0%	46.0%	-99.3%	>15.27	>13.91	flash	
	0.02	1.0%	46.0%		>15.27	11.39		
MYLAR MO C1	0.00	0.0%	131.0%		>14.91	>12.41		Mylar brittle discolored yellowed
	0.00	0.0%	131.0%	-100.0%	>14.91	>12.57	flash	
	0.00	0.0%	131.0%		>14.91	>12.39		
NO 410 D1	0.18	4.5%	17.0%		10.67	>12.29		oil in nomex raised dielectric
	0.22	5.5%	17.0%	-69.6%	10.67	>12.47	flash	
	0.22	5.5%	17.0%		10.67	>12.03		
NO MI 418 E1	0.05	1.3%	4.0%		10.23	11.79		oil in insulation
	0.04	1.0%	4.0%	-77.1%	10.23	12.23	18.1%	
	0.02	0.5%	4.0%		10.23	12.24		
MEL 228 F1	0.00	0.0%	160.0%		>14.22	>12.45		Brittle,discolored yellowed
	0.00	0.0%	160.0%	-100.0%	>14.22	>13.52	flash	
	0.00	0.0%	160.0%		>14.22	>13.13		
After 500 hour exposure plus a 24 hourairbake at 150°C(302°F)								
NO/MY/NO A2	0.02	0.5%	20.0%		>18.97	11.68		darkened delamination dielectric failed
	0.34	8.5%	20.0%	-78.3%	>18.97	12.36	flash	
	0.16	4.0%	20.0%		>18.97	16.72		
DA/MY/DA B2	0.03	1.5%	46.0%		>15.27	>16.09		darkened delamination mylar brown
	0.04	2.0%	46.0%	-96.0%	>15.27	>15.23	flash	
	0.04	2.0%	46.0%		>15.27	>14.34		
MYLAR MO C2	0.00	0.0%	131.0%		>14.91	>13.04		brittle,mylar brown
	0.00	0.0%	131.0%	-100.0%	>14.91	>12.24	flash	
	0.00	0.0%	131.0%		>14.91	>13.27		
NOMEX 410 D2	0.16	4.0%	17.0%		10.67	10.13		N/C
	0.16	4.0%	17.0%	-77.0%	10.67	9.93	-3.8%	
	0.15	3.8%	17.0%		10.67	10.72		
NO/MI 418 E2	0.04	1.0%	4.0%		10.23	10.33		N/C
	0.03	0.8%	4.0%	-75.0%	10.23	9.29	-0.8%	
	0.05	1.3%	4.0%		10.23	10.81		
MEL 228 F2	0.00	0.0%	160.0%		>14.22	>12.9		mylar brown brittle
	0.00	0.0%	160.0%	-100.0%	>14.22	>13.17	flash	
	0.00	0.0%	160.0%		>14.22	>13.03		

SLEEVE--HCFC-22/Suniso 3GS oil @ 260°F(127°C)

500 HRS in HCFC-22/Suniso 3GS oil @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5372	0.6031	12.25%	Able to pull layers of nomex apart
B1 MYLAR	0.5126	0.5294	3.28%	Able to pul layers of mylar apart
C1 NO/MY	0.3928	0.4186	6.57%	N/C
HCFC-22/Suniso 3GS oil @ 260°F---->24 hrs @ 302°F				
A2 NOMEX	0.5510	0.5803	5.32%	Nomex turned darker, may be due to oil.
B2 MYLAR	0.4835	0.4843	0.17%	darkened some pockets in mylar, pulled away
C2 NO/MY	0.3925	0.3981	1.43%	darkened some pockets in mylar, pulled away

500 HRS in HCFC-22/Suniso 3GS @ 260 F									
D	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.4659	1.4770	0.76%	39.02	15.10		0.04	2.00%	N/C
				39.02	17.05	-56.43%	0.03	1.50%	
				39.02	18.85		0.07	3.50%	
B1 Polyester	0.7262	0.7567	4.20%	56.12	19.77		0.10	5.00%	N/C
				56.12	24.02	-60.26%	0.19	9.50%	
				56.12	23.12		0.14	7.00%	
C1 Permacel	1.4649	1.5691	7.11%	88.50	23.55		0.06	3.00%	very
				88.50	38.57	-69.26%	0.06	3.00%	darkened
				88.50	19.50		0.10	5.00%	
500 HRS in HCFC-22/Suniso 3GS @ 260 F-> 302°F 24 HRS									
A2 Glass	1.4313	1.4277	-0.25%	39.02	20.07		0.05	2.50%	N/C
				39.02	22.50	-39.40%	0.06	3.00%	
				39.02	28.37		0.06	3.00%	
B2 Polyester	0.6474	0.6507	0.51%	56.12	21.35		0.95	47.50%	discolored
				56.12	23.82	-60.61%	0.70	35.00%	
				56.12	21.15		0.69	34.50%	
C2 Permacel	1.5155	1.4696	-3.03%	88.50	13.10		0.05	2.50%	very
				88.50	20.32	-78.57%	0.06	3.00%	Darkened
				88.50	23.47		0.08	4.00%	

TIE CORD--HCFC-22/Suniso 3GS oil @ 260°F(127°C)

500 HRS IN R-22/Suniso 3GS @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2523	0.2579	2.22%	N/C	28.36	22.25		0.40	20.0%
					28.36	23.17	-20.97%	0.43	21.5%
					28.36	21.82		0.42	21.0%
500 HRS IN R-22/Suniso 3GS -> 24 HRS @ 302°F									
A2	0.2404	0.2405	0.042%	N/C	28.36	22.55		0.47	23.5%
					28.36	22.15	-21.76%	0.45	22.5%
					28.36	21.87		0.45	22.5%

LEAD WIRE INSULATION-HCFC-22/Suniso 3GS @ 260°F(127°C)

500 HRS IN HCFC-22/Suniso 3GS @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	3.9593	4.1507	4.83%	N/C	9.61	8.27	
A1					9.61	8.81	-8.84%
					9.61	9.20	
DTMD	4.2976	4.4731	4.08%	N/C	9.95	10.31	
B1					9.95	11.99	11.06%
					9.95	10.85	
HCFC-22/Suniso 3GS @ 260°F -> 24 HRS @ 302°F							
DMD	4.0622	4.0740	0.29%	darkened	9.61	8.27	
A2					9.61	10.13	-1.01%
					9.61	10.14	
DTMD	4.3780	4.2444	-3.05%	darkened	9.95	11.54	
B2					9.95	12.78	22.81%
					9.95	12.34	

Appendix C

**Experimental Data for HCFC-124/Shrieve
Zerol-150 Exposure at 127°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HCFC-124/Shrieve Zerol-150 oil @260°F(127°C)

500 hours in HCFC-124/Shrieve Zerol-150 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	22.7381	22.7460	0.035%	N/C	576	370		15.80	13.40	
					576	419	-30.6%	15.80	14.94	-5.0%
					576	411		15.80	16.67	
B1	27.103	27.1693	0.245%	N/C	736	735		11.62	12.94	
					736	696	-2.1%	11.62	11.63	6.5%
					736	730		11.62	12.54	
C1	23.9575	23.9641	0.028%	N/C	579	228		16.58	16.54	
					579	217	-61.8%	16.58	11.23	-18.6%
					579	218		16.58	12.70	
500 hours in HCFC-124/Shrieve Zerol-150 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	22.3776	22.3812	0.016%	N/C	576	416		15.80	15.64	
					576	526	-14.7%	15.80	15.61	-1.4%
					576	532		15.80	15.49	
B2	27.1936	27.2069	0.049%	N/C	736	731		11.62	11.31	
					736	734	-2.1%	11.62	11.16	-3.6%
					736	697		11.62	11.15	
C2	24.4878	24.4921	0.018%	N/C	579	421		16.58	18.04	
					579	464	-22.6%	16.58	17.65	-0.1%
					579	459		16.58	14.01	

TWISTED PAIRS/WIRE A/WITH VARNISH-HCFC-124/Shrieve Zerol-150 oil @260°F(127°C)

500 hours in HCFC-124/S hrive Zerol-150 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE	U-475 A1	21.8834	21.9253	0.191%	N/C	16.24	13.47		430	386	
						16.24	17.21	-8.87%	430	544	15.81%
						16.24	13.72		430	564	
	Y-390 B1	21.9762	22.0524	0.347%	N/C	18.77	13.49		510	483	
						18.77	16.04	-17.46%	510	434	-12.55%
						18.77	16.95		510	421	
	ER-610 C1	25.7708	25.7982	0.106%	N/C	15.57	14.90		442	340	
						15.57	14.26	-3.19%	442	373	-18.78%
						15.57	16.06		442	364	
	Y-833 D1	21.6145	21.6191	0.021%	N/C	12.04	11.64		578	564	
						12.04	13.02	1.69%	578	501	-12.57%
						12.04	12.07		578	451	
	923 E1	22.9852	23.0256	0.176%	N/C	16.76	10.07		606	585	
						16.76	20.00	-0.42%	606	585	-2.42%
						16.76	20.00		606	604	
ISO-800 F1	21.5273	21.5502	0.106%	N/C	19.08	14.90		580	492		
					19.08	14.94	-21.38%	580	450	-17.64%	
					19.08	15.16		580	491		
500 hours in HCFC-124/Shrieve Zerol-150 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°											
IMIDE	U-475 A2	22.1815	22.1936	0.055%	N/C	16.24	15.26		430	242	
						16.24	20.17	9.13%	430	283	-30.08%
						16.24	17.74		430	377	
	Y-390 B2	21.8520	21.8775	0.117%	N/C	18.77	15.51		510	492	
						18.77	11.38	-31.29%	510	653	8.56%
						18.77	11.80		510	516	
	ER-610 C2	25.7408	25.7507	0.038%	N/C	15.57	17.42		442	279	
						15.57	13.16	-7.69%	442	306	-32.73%
						15.57	12.54		442	307	
	Y-833 D2	21.6424	21.6318	-0.049%	N/C	12.04	10.73		578	427	
						12.04	10.29	-10.88%	578	529	-19.78%
						12.04	11.17		578	435	
	923 E2	22.7565	22.7771	0.091%	N/C	16.76	18.24		606	614	
						16.76	damage	0.48%	606	565	-3.74%
						16.76	15.44		606	571	
ISO-800 F2	21.8392	21.8446	0.025%	N/C	19.08	19.97		580	383		
					19.08	15.94	-8.09%	580	385	-22.93%	
					19.08	16.70		580	573		

TWISTED PAIRS/WIRE B/WITH VARNISH -HCFC-124/S hrieve Zerol-150 oil @260°F(127°C)

500 HOURS in HCFC-124/Shrieve Zerol-150 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	EXP T PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	25.2764	25.3396	0.25%	N/C	13.32	12.00		746	733	
						13.32	13.56	2.50%	746	733	-1.97%
						13.32	15.40		746	728	
	Y-390 B1	23.2699	23.3299	0.26%	N/C	12.28	8.04		755	738	
						12.28	12.58	-0.11%	755	743	-1.85%
						12.28	16.18		755	742	
	ER-610 C1	28.1795	28.2264	0.17%	N/C	12.73	12.68		734	732	
						12.73	13.74	1.41%	734	722	-0.68%
						12.73	12.31		734	733	
	Y-833 D1	22.0928	22.1160	0.11%	N/C	12.49	12.78		734	641	
						12.49	12.12	-2.03%	734	712	-5.54%
						12.49	11.81		734	727	
	923 E1	26.4145	26.4814	0.25%	N/C	14.38	16.62		742	731	
						14.38	16.01	16.90%	742	734	-0.72%
						14.38	17.80		742	745	
	ISO-800 F1	29.0692	29.1404	0.24%	N/C	12.29	14.10		747	740	
						12.29	12.67	8.68%	747	742	-0.71%
						12.29	13.30		747	743	
HCFC-124/ Zerol-150 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A2	26.0095	26.0230	0.05%	N/C	13.32	13.79		746	725	
						13.32	12.46	-1.20%	746	729	-2.55%
						13.32	13.23		746	727	
	Y-390 B2	24.1500	24.1950	0.19%	N/C	12.28	13.09		755	734	
						12.28	15.82	9.91%	755	744	-2.12%
						12.28	11.58		755	745	
	ER-610 C2	28.6049	28.6172	0.04%	N/C	12.73	11.61		734	731	
						12.73	12.31	-6.49%	734	730	-0.54%
						12.73	11.79		734	729	
	Y-833 D2	22.2900	22.2835	-0.03%	N/C	12.49	11.76		734	730	
						12.49	11.86	-6.51%	734	665	-3.45%
						12.49	11.41		734	731	
	923 E2	27.3243	27.3606	0.13%	N/C	14.38	14.63		742	732	
						14.38	13.86	-6.65%	742	733	-1.35%
						14.38	11.78		742	728	
	ISO-800 F2	29.0662	29.0769	0.04%		12.29	11.99		747	737	
					N/C	12.29	13.18	-0.30%	747	731	-1.74%
						12.29	11.59		747	749	

TWISTED PAIRS/WIRE C/WITH VARNISH-HCFC-124/S hrieve Zerol-150 @ 260°F(127°C)

500 Hours in HCFC-124/S hrieve Zerol-150 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER IMIDE	U-475 A1	23.8490	23.8555	0.027%	N/C	15.10	11.37		469	527	
						15.10	10.24	-25.03%	469	327	2.06%
						15.10	12.35		469	582	
	Y-390 B1	26.9354	26.9828	0.176%	N/C	18.24	20.00		473	408	
						18.24	20.00	2.16%	473	473	-9.87%
						18.24	15.90		473	398	
	ER-610 C1	25.6281	25.6033	-0.097%	N/C	14.53	18.77		494	558	
						14.53	18.03	20.60%	494	473	-0.94%
						14.53	15.77		494	437	
	Y-833 D1	26.0443	26.0544	0.039%	N/C	11.38	12.75		557	318	
						11.38	12.81	15.82%	557	349	-39.74%
						11.38	13.98		557	340	
	923 E1	23.3496	23.4045	0.235%	N/C	15.85	13.90		503	560	
						15.85	13.77	-12.16%	503	403	-9.54%
						15.85	14.10		503	402	
	ISO-800 F1	22.2677	22.2835	0.071%	N/C	14.75	15.48		632	370	
						14.75	16.61	9.04%	632	486	-27.74%
						14.75	16.16		632	514	
	HCFC-124/S hrieve Zerol-150 @ 260°F plus 24 hours @ 302°F(150°C)										
	U-475 A2	23.8799	23.8659	-0.059%	N/C	15.10	10.86		469	449	
						15.10	11.22	-23.80%	469	505	0.28%
						15.10	12.44		469	457	
	Y-390 B2	26.1871	26.2125	0.097%	N/C	18.24	19.75		473	458	
						18.24	19.70	8.83%	473	428	-3.52%
						18.24	20.00		473	483	
	ER-610 C2	25.9784	25.9475	-0.119%	N/C	14.53	11.10		494	511	
						14.53	12.44	-22.85%	494	409	-3.24%
						14.53	10.09		494	514	
	Y-833 D2	25.7970	25.7914	-0.022%	N/C	11.38	16.14		557	368	
						11.38	20.00	51.64%	557	409	-34.53%
						11.38	15.63		557	317	
	923 E2	23.2933	23.3268	0.144%	N/C	15.85	20.00		503	450	
						15.85	12.71	6.04%	503	462	-9.48%
						15.85	17.71		503	454	
	ISO-800 F2	22.2815	22.2877	0.028%	N/C	14.75	20.00		632	621	
						14.75	17.48	24.14%	632	561	-14.50%
						14.75	17.45		632	439	

HELICAL COILS/WIRE A---HCFC-124/Shrieve Zerol-150 oil @260°F(127°C)

	500 HRS in HCFC-124/Zerol-150@ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE	U-475 A1	40.2236	40.3047	0.202%	N/C	73.73	30.50	-47.44%
						73.73	52.75	
						73.73	33.00	
	Y-390 B1	38.5855	38.6681	0.214%	N/C	43.78	27.10	-33.80%
						43.78	32.95	
						43.78	26.90	
	ER-610 C1	39.3549	39.4156	0.154%	N/C	51.81	10.60	-62.57%
						51.81	24.37	
						51.81	23.20	
	Y-833 D1	38.0012	38.0121	0.029%	N/C	9.85	12.25	40.51%
						9.85	17.15	
						9.85	12.12	
	923 E1	39.5662	39.6323	0.167%	N/C	41.28	33.55	-16.26%
						41.28	32.80	
						41.28	37.35	
	ISO-800 F1	37.8992	37.9346	0.093%	N/C	45.01	41.17	-11.28%
						45.01	38.70	
						45.01	41.32	
	500 HRS in HCFC-124/Zerol-150 @ 260 F -> 24 HRS 302°F							
U-475 A2	40.7901	40.8164	0.064%	N/C	73.73	54.30	-23.73%	
					73.73	50.90		
					73.73	61.57		
Y-390 B2	39.1521	39.1710	0.048%	N/C	43.78	24.50	-41.28%	
					43.78	25.17		
					43.78	27.45		
ER-610 C2	40.5465	40.5675	0.052%	N/C	51.81	42.57	-30.18%	
					51.81	34.80		
					51.81	31.15		
Y-833 D2	39.8148	39.7631	-0.130%	N/C	9.85	19.87	123.72%	
					9.85	21.07		
					9.85	25.17		
923 E2	40.4278	40.4835	0.138%	N/C	41.28	39.30	-16.25%	
					41.28	30.22		
					41.28	34.20		
ISO-800 F2	37.5160	37.5360	0.053%	N/C	45.01	25.72	-18.45%	
					45.01	24.75		
					45.01	59.65		

HELICAL COILS/WIRE B-HCFC-124/Shrieve Zerol-150 Oil

500 HRS in HCFC-124/Shrieve Zerol-150 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
P O L Y E S T E R	U-475 A1	37.4514	37.5548	0.276%	N/C	40.14	41.40	-16.77%
						40.14	31.12	
						40.14	27.70	
	Y-390 B1	37.8148	37.9263	0.295%	N/C	36.12	36.30	-1.01%
						36.12	35.87	
						36.12	35.10	
	ER-610 C1	37.8819	37.9738	0.243%	N/C	35.96	25.92	-27.57%
						35.96	24.30	
						35.96	27.92	
P O L Y A M I D E	Y-833 D1	36.7933	36.8216	0.077%	N/C	33.14	18.22	-45.09%
						33.14	21.25	
						33.14	15.12	
	923 E1	37.4935	37.5530	0.159%	N/C	40.52	31.62	-11.45%
						40.52	42.82	
						40.52	33.20	
	ISO-800 F1	36.9535	37.0199	0.180%	N/C	20.20	18.02	-3.56%
						20.20	20.92	
						20.20	19.50	
500 HRS in HCFC-124/Zerol-150 @ 260 F -> 24 HRS 302°F								
I M I D E	U-475 A2	37.9410	37.9782	0.098%	N/C	40.14	28.70	-19.83%
						40.14	35.17	
						40.14	32.67	
	Y-390 B2	37.2453	37.3014	0.151%	N/C	36.12	30.12	-11.20%
						36.12	35.40	
						36.12	30.70	
E P O X Y	ER-610 C2	37.8732	37.8985	0.067%	N/C	35.96	24.47	-20.99%
						35.96	26.22	
						35.96	34.55	
	Y-833 D2	36.7758	36.7699	-0.016%	N/C	33.14	18.92	-38.02%
						33.14	16.65	
						33.14	26.05	
G L A S S	923 E2	38.0573	38.0962	0.102%	N/C	40.52	23.25	-29.55%
						40.52	29.37	
						40.52	33.02	
	ISO-800 F2	38.1027	38.1164	0.036%	N/C	20.20	18.77	-6.42%
						20.20	18.42	
						20.20	19.52	

HELICAL COILS/WIRE C-HCFC-124/Shrieve Zerol-150 oil @ 260°F(127°C)

500 HRS in HCFC-124/Shrieve Zerol-150 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTERIMIDE POLYAMIDEIMIDE	U-475 A1	37.7929	37.8676	0.198%	N/C	51.21	23.17	-27.10%
						51.21	46.90	
						51.21	41.92	
	Y-390 B1	40.7938	40.8402	0.114%	N/C	50.72	26.35	-46.59%
						50.72	29.77	
						50.72	25.15	
	ER-610 C1	38.4619	38.5300	0.177%	N/C	58.33	18.52	-56.82%
						58.33	20.17	
						58.33	36.87	
	Y-833 D1	38.5156	38.4274	-0.229%	N/C	5.84	11.25	99.43%
						5.84	11.07	
						5.84	12.62	
	923 E1	40.3966	40.4652	0.170%	N/C	49.26	28.27	-46.89%
						49.26	26.45	
						49.26	23.77	
	ISO-800 F1	39.8049	39.8481	0.109%	N/C	36.08	40.32	4.78%
						36.08	33.22	
						36.08	39.87	
500 HRS in HCFC-124/Shrieve Zerol-150 @ 260 F-> 24 HRS 302°F								
POLYAMIDEIMIDE	U-475 A2	37.1777	37.2032	0.069%	N/C	51.21	69.65	37.76%
						51.21	68.37	
						51.21	73.62	
	Y-390 B2	38.9310	38.9581	0.070%	N/C	50.72	31.60	-44.90%
						50.72	27.22	
						50.72	25.02	
	ER-610 C2	37.9620	37.9830	0.055%	N/C	58.33	31.60	-38.74%
						58.33	25.85	
						58.33	49.75	
	Y-833 D2	39.2567	39.1607	-0.245%	N/C	5.84	10.50	123.00%
						5.84	11.95	
						5.84	16.62	
	923 E2	39.3561	39.3926	0.093%	N/C	49.26	22.35	-49.95%
						49.26	26.35	
						49.26	25.27	
	ISO-800 F2	39.7532	39.7609	0.019%	N/C	36.08	56.80	21.32%
						36.08	30.60	
						36.08	43.92	

SINGLE MAG WIRE WITHOUT VARNISH-HCFC-124/S hrieve Zerol-150 @ 260°F(127°C))

500 HRS in HCFC-124/Zerol-150 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.4228	3.426	0.093%	N/C	
					YES
B1	3.7686	3.776	0.196%	N/C	
					YES
C1	3.372	3.3748	0.083%	N/C	
					YES
500 HRS in HCFC-124/Zerol-150-> 302°F for 24 HRS					
A2	3.4972	3.4971	-0.003%	N/C	
					YES
B2	3.7452	3.7473	0.056%	N/C	
					YES
C2	3.453	3.451	-0.058%	N/C	
					YES

SINGLE/WIRE A/WITH VARNISH--HCFC-124/S hrieve Zerol-150 oil 260°F(127°C)

500 HRS in HCFC-124/Zerol-150 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
P O L Y E S T E R P O L Y E A M I D E I M I D E	U-475 A1	3.7529	3.7593	0.171%	N/C	
						NO
	Y-390 B1	3.8351	3.8453	0.266%	N/C	
						NO
	ER-610 C1	3.4849	3.4875	0.075%	N/C	
						YES
	Y-833 D1	3.8036	3.8045	0.024%	N/C	
						NO
	923 E1	3.9411	3.9491	0.203%	N/C	
						NO
	ISO-800 F1	3.7302	3.7340	0.102%	N/C	
						NO
	HCFC-124/Zerol-150 -> 24 HRS @ 302°F					
	U-475 A2	3.7431	3.7431	0.000%	N/C	
						NO
	Y-390 B2	3.8000	3.8000	0.000%	N/C	
						NO
	ER-610 C2	3.4025	3.4025	0.000%	N/C	
						YES
	Y-833 D2	3.9083	3.9048	-0.090%	N/C	
						NO
	923 E2	3.8883	3.8938	0.141%	N/C	
						NO
	ISO-800 F2	3.7975	3.7957	-0.047%	N/C	
						NO

SINGLE/WIRE B/WITH VARNISH--HCFC-124/S 1rieve Zerol-150 oil @ 260°F(127°C)

500 HRS in HCFC-124/Zerol-150 @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE EPOXY GLASS	U-475 A1	3.6829	3.6934	0.285%	N/C	
						NO
	Y-390 B1	3.9825	3.9970	0.364%	N/C	
						NO
	ER-610 C1	3.6427	3.6443	0.044%	N/C	
						YES
	Y-833 D1	3.7921	3.7990	0.182%	N/C	
						YES
	923 E1	3.6919	3.7050	0.355%	N/C	
						NO
	ISO-800 F1	3.6663	3.6711	0.131%	N/C	
						NO
HCFC-124/Zerol-150 @ 260°F(127°C)						
U-475 A2	3.6682	3.6636	-0.125%	N/C		
					NO	
Y-390 B2	3.8952	3.8999	0.121%	N/C		
					NO	
ER-610 C2	3.6845	3.6816	-0.079%	N/C		
					Yes	
Y-833 D2	3.7350	3.7335	-0.040%	N/C		
					YES	
923 E2	3.7351	3.7426	0.201%	N/C		
					NO	
ISO-800 F2	3.6610	3.6581	-0.079%	N/C		
					NO	

SINGLE/WIRE C/WITH VARNISH--HCFC-124/S hrieve Zerol-150 @ 260°F(127°C)

		500 HRS in HCFC-124/Zerol-150 @ 260°F(127°C)					
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX	
POLYESTERIMIDE	U-475 A1	3.5397	3.5479	0.232%	N/C	No	
	Y-390 B1	3.6475	3.6562	0.239%	N/C	NO	
	ER-610 C1	3.5756	3.5768	0.034%	N/C	NO	
	Y-833 D1	3.4621	3.4629	0.023%	N/C	YES	
	923 E1	3.8174	3.8245	0.186%	N/C	NO	
	ISO-800 F1	3.4873	3.4850	-0.066%	N/C	NO	
		HCFC-124/Zerol-150 @ 260°F -> 24 HRS @ 302F					
POLYAMIDE	U-475 A2	3.5612	3.5587	-0.070%	N/C	YES	
	Y-390 B2	3.5843	3.5873	0.084%	N/C	NO	
	ER-610 C2	3.5677	3.5651	-0.073%	N/C	NO	
	Y-833 D2	3.4743	3.4708	-0.101%	N/C	YES	
	923 E2	3.8380	3.8432	0.135%	N/C	NO	
	ISO-800 F2	3.4888	3.4884	-0.011%	N/C	NO	

Varnish Disks----HCFC-124/S hrieve Zerol-150 Oil

500 HRS IN R-124/Zerol-150 Oil @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.0977	2.1397	2.00%	N/C	N/C
Y-390 B1	2.2072	2.2085	0.06%	slightly warped	N/C
ER-610 C1	1.9784	2.0847	5.37%	surface appears cloudy	N/C
Y-833 D1	2.2822	2.3490	2.93%	N/C	N/C
923 E1	1.5897	1.6035	0.87%	N/C	N/C
ISO-800 F1	1.3500	1.3320	-1.33%	slightly warped	N/C
R-124/Zerol-150 at --->24 hour at 302°F.					
U-475 A2	2.4054	2.4058	0.02%	darkened	N/C
Y-390 B2	2.0235	2.0143	-0.45%	slightly warped	N/C
ER-610 C2	1.8220	1.8532	1.71%	darkened	N/C
Y-833 D2	2.3713	2.4086	1.57%	slightly warped	N/C
923 E2	2.0330	2.0418	0.43%	darkened	N/C
ISO-800 F2	1.5173	1.4307	-5.71%	slightly warped	N/C

SHEET INSULATION-HCFC-124/S hrieve Zerol-150 oil @ 260°F(127°C)

	500 HRS in HCFC-124/Schriev Zerol-150 @ 260 F								
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS MILs	TENSILE STR BASE	TENSILE STR EXP	%CHANGE TENSILE
NO/MY/NO A1	7.3592	7.8442	6.59%	0.330	61.17	21	17.4	8.83	
				0.420	73.20	21	17.4	8.30	-50.51%
				0.495	90.52	21	17.4	8.71	
DA/MY/DA B1	7.1013	7.1815	1.13%	0.360	16.02	21	13.7	2.12	
				0.380	15.95	21	13.7	2.00	-84.82%
				0.375	16.70	21	13.7	2.12	
MYLAR MO C1	3.7728	3.8664	2.48%	0.430	0.00	10	21.7	0.00	
				0.445	0.00	10	21.7	0.00	-100.00%
				0.450	0.00	10	21.7	0.00	
NO 410 D1	3.7410	4.1766	11.64%	0.450	82.72	10	18.7	18.38	
				0.525	102.40	10	18.7	19.50	1.88%
				0.507	97.70	10	18.7	19.27	
NO MI 418 E1	3.7877	4.7988	26.69%	0.488	35.90	9	7.5	8.17	
				0.485	33.17	9	7.5	7.60	5.11%
				0.500	35.45	9	7.5	7.88	
MEL 228 F1	4.2637	4.3157	1.22%	0.420	0.00	10	21.7	0.00	
				0.435	0.00	10	21.7	0.00	-100.00%
				0.512	0.00	10	21.7	0.00	
500 HRS in HCFC-124/Schieve Zerol-150 @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	6.9426	7.0459	1.49%	0.381	68.15	21	17.4	8.52	
				0.430	73.25	21	17.4	8.11	-54.98%
				0.480	69.25	21	17.4	6.87	
DA/MY/DA B2	6.8327	6.8054	-0.40%	0.430	19.02	21	13.7	2.11	
				0.380	2.10	21	13.7	0.26	-93.21%
				0.390	3.45	21	13.7	0.42	
MYLAR MO C2	3.9026	3.9084	0.15%	0.398	0.00	10	21.7	0.00	
				0.395	0.00	10	21.7	0.00	-100.00%
				0.436	0.00	10	21.7	0.00	
NOMEX 410 D2	3.8099	3.9891	4.70%	0.475	93.55	10	18.7	19.69	
				0.518	100.00	10	18.7	19.31	4.09%
				0.495	96.00	10	18.7	19.39	
NO/MI 418 E2	3.8599	4.1392	7.24%	0.475	28.05	10	7.5	5.91	
				0.518	27.85	10	7.5	5.38	-24.00%
				0.495	28.80	10	7.5	5.82	
MEL 228 F2	4.2999	4.3136	0.32%	0.455	0.00	10	21.7	0.00	
				0.436	0.00	10	21.7	0.00	-100.00%
				0.416	0.00	10	21.7	0.00	

SHEET INSULATION-HCFC-124/S hrieve Zerol-150 oil @ 260°F(127°C)

After 500 hour exposure at 260°F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A1	0.40	10.0%	20.0%		>18.97	>13.91		Mylar brittle discolored yellowed
	0.33	8.3%	20.0%	-54.4%	>18.97	>14.91	flash	
	0.41	10.3%	20.0%		>18.97	>16.50		
DA/MY/DA B1	0.02	1.0%	46.0%		>15.27	>14.07		Mylar Brittle
	0.01	0.5%	46.0%	-98.2%	>15.27	>15.59	flash	
	0.02	1.0%	46.0%		>15.27	>15.82		
MYLAR MO C1	0.00	0.0%	131.0%		>14.91	>12.30		Mylar brittle discolored yellowed
	0.00	0.0%	131.0%	-100.0%	>14.91	>12.97	flash	
	0.00	0.0%	131.0%		>14.91	>11.44		
NO 410 D1	0.32	8.0%	17.0%		10.67	>11.34		oil in nomex raised dielectric
	0.43	10.8%	17.0%	-45.1%	10.67	>12.44	flash	
	0.37	9.3%	17.0%		10.67	>12.29		
NO MI 418 E1	0.05	1.3%	4.0%		10.23	11.65		oil in insulation
	0.04	1.0%	4.0%	-72.9%	10.23	12.25	14.0%	
	0.04	1.0%	4.0%		10.23	11.10		
MEL 228 F1	0.00	0.0%	160.0%		>14.22	>12.82		Brittle,discolored yellowed
	0.00	0.0%	160.0%	-100.0%	>14.22	>12.75	flash	
	0.00	0.0%	160.0%		>14.22	>12.45		
After 500 hour exposure plus a 24 hour air bake at 150°C(302°F)								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A2	0.34	8.5%	20.0%		>18.97	>15.99		darkened delamination
	0.35	8.8%	20.0%	-57.5%	>18.97	>16.47	flash	
	0.33	8.3%	20.0%		>18.97	>17.7		
DA/MY/DA B2	0.03	1.5%	46.0%		>15.27	>15.33		darkened delamination mylar brown
	0.04	2.0%	46.0%	-96.7%	>15.27	>13.11	flash	
	0.02	1.0%	46.0%		>15.27	>14.15		
MYLAR MO C2	0.00	0.0%	131.0%		>14.91	>12.71		brittle,mylar brown
	0.00	0.0%	131.0%	-100.0%	>14.91	>13.07	flash	
	0.00	0.0%	131.0%		>14.91	>12.31		
NOMEX 410 D2	0.39	9.8%	17.0%		10.67	10.53		N/C
	0.40	10.0%	17.0%	-40.7%	10.67	10.57	-3.2%	
	0.42	10.5%	17.0%		10.67	9.87		
NO/MI 418 E2	0.07	1.8%	4.0%		10.23	9.91		N/C
	0.04	1.0%	4.0%	-66.7%	10.23	8.76	-9.5%	
	0.05	1.3%	4.0%		10.23	9.10		
MEL 228 F2	0.00	0.0%	160.0%		>14.22	>12.53		mylar brown brittle
	0.00	0.0%	160.0%	-100.0%	>14.22	>13.10	flash	
	0.00	0.0%	160.0%		>14.22	>12.77		

SLEEVING--HCFC-124/Shrieve Zerol-150 oil @ 260°F(127°C)

500 HRS in HCFC-124/S hrive Zerol-150 oil @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5439	0.6095	12.06%	Darkened, Nomex discolored
				black
				see photo
B1 MYLAR	0.4787	0.4877	1.88%	
				N/C
C1 NO/MY	0.4000	0.4180	4.50%	Black discoloration of the
				nomex inside
				see photo
HCFC-124/Shrieve Zerol-150 oil @ 260°F plus24 hrs @ 302°F				
A2 NOMEX	0.5371	0.5514	2.66%	N/C
				same condition as above
B2 MYLAR	0.4700	0.4673	-0.57%	darkened
				some pockets in
				mylar, pulled away
C2 NO/MY	0.3982	0.3995	0.33%	N/C
				same condition as above
				see photo

500 HRS in HCFC-124/Shrieve Zerol-150 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.5114	1.5141	0.18%	39.02	53.50		0.06	3.00%	N/C
				39.02	62.12	35.95%	0.06	3.00%	
				39.02	43.52		0.05	2.50%	
B1 Polyester	0.7275	0.7429	2.12%	56.12	26.02		0.06	3.00%	N/C
				56.12	25.22	-53.93%	0.05	2.50%	
				56.12	26.32		0.06	3.00%	
C1 Permacel	1.6171	1.9128	18.29%	88.50	65.82		0.12	6.00%	very
				88.50	44.62	-36.39%	0.21	10.50%	darkened
				88.50	58.45		0.16	8.00%	
500 HRS in HCFC-124/Shrieve Zerol-150 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.4230	1.4222	-0.06%	39.02	64.07		0.06	3.00%	N/C
				39.02	54.55	55.89%	0.06	3.00%	
				39.02	63.87		0.06	3.00%	
B2 Polyester	0.6620	0.6654	0.51%	56.12	20.87		0.06	3.00%	discolored
				56.12	19.90	-69.57%	0.04	2.00%	
				56.12	10.47		0.10	5.00%	
C2 Permacel	1.5531	1.4890	-4.13%	88.50	52.35		0.10	5.00%	very
				88.50	68.37	-19.91%	0.10	5.00%	Darkened
				88.50	91.92		0.13	6.50%	

TIE CORD--HCFC-124/S hrieve Zerol-150 oil @ 260°F(127°C)

500 HRS IN R-124/Shrieve Zerol-150 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2131	0.2148	0.80%	N/C	28.36	38.87		0.45	22.5%
					28.36	37.02	32.18%	0.43	21.5%
					28.36	36.57		0.48	24.0%
500 HRS IN R-124/S hrieve Zerol-150 -> 24 HRS @ 302°F									
A2	0.2347	0.2339	-0.341%	N/C	28.36	33.42		0.42	21.0%
					28.36	34.40	15.86%	0.63	31.5%
					28.36	30.75		0.47	23.5%

LEAD WIRE INSULATION-HCFC-124/Schrieve Zerol-150 @ 260°F(127°C)

500 HRS IN HCFC-124/Schrieve Zerol-150 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.0187	4.1877	4.21%	N/C	9.61	8.64	
A1					9.61	7.68	-17.93%
					9.61	7.34	
DTMD	4.3659	4.5285	3.72%	N/C	9.95	11.23	
B1					9.95	13.34	30.42%
					9.95	14.36	
HCFC-124/Schrieve Zerol-150 @ 260°F -> 24 HRS @ 302°F							
DMD	4.0743	4.1148	0.99%	darkened	9.61	9.97	
A2					9.61	10.10	1.70%
					9.61	9.25	
DTMD	4.3351	4.3729	0.87%	darkened	9.95	12.41	
B2					9.95	10.97	20.67%
					9.95	12.64	

Appendix D

**Experimental Data for HCFC-142b/Shrieve
Zerol-150 Exposure at 127°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HCFC-142b/Shrieve Zerol-150 oil @260°F(127°C)

500 hours in HCFC-142b/Shrieve Zerol-150 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	21.892	21.9106	0.085%	N/C	576	317		15.80	16.13	
					576	390	-37.3%	15.80	12.17	-19.2%
					576	376		15.80	10.00	
B1	27.3851	27.4600	0.274%	N/C	736	732		11.62	13.10	
					736	617	-6.7%	11.62	11.96	8.3%
					736	711		11.62	12.68	
C1	23.9242	23.9430	0.079%	N/C	579	286		16.58	15.37	
					579	334	-53.1%	16.58	10.95	-16.8%
					579	195		16.58	15.08	
500 hours in HCFC-142b/Shrieve Zerol-150 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	21.8597	21.8680	0.038%	N/C	576	391		15.80	16.39	
					576	393	-34.5%	15.80	15.77	-3.1%
					576	348		15.80	13.79	
B2	27.7826	27.8017	0.069%	N/C	736	729		11.62	10.54	
					736	738	-0.4%	11.62	11.03	-6.1%
					736	732		11.62	11.16	
C2	23.5414	23.5523	0.046%	N/C	579	390		16.58	12.72	
					579	230	-45.8%	16.58	16.16	-10.9%
					579	322		16.58	15.46	

TWISTED PAIRS/WIRE A/WITH VARNISH-HCFC-142b/Shrieve Zerol-150 oil @260°F(127°C)

500 hours in HCFC-142b/Shrieve Zerol-150 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE	U-475 A1	22.4351	22.5156	0.359%	N/C	16.24	15.76		430	342	
						16.24	18.23	-8.09%	430	323	-18.91%
						16.24	10.79		430	381	
	Y-390 B1	22.5404	22.6658	0.556%	N/C	18.77	17.25		510	433	
						18.77	14.38	-11.01%	510	429	-18.43%
						18.77	18.48		510	386	
	ER-610 C1	25.8301	25.8792	0.190%	N/C	15.57	16.75		442	258	
						15.57	15.40	5.84%	442	270	-41.55%
						15.57	17.29		442	247	
	Y-833 D1	21.2232	21.2332	0.047%	N/C	12.04	8.51		578	304	
						12.04	12.43	-8.78%	578	405	-38.00%
						12.04	12.01		578	366	
	923 E1	22.9377	23.0245	0.378%	N/C	16.76	15.53		606	423	
						16.76	19.24	-11.40%	606	418	-28.49%
						16.76	9.78		606	459	
	ISO-800 F1	26.8675	26.9451	0.289%	N/C	19.08	18.89		580	368	
						19.08	14.53	-7.20%	580	390	-35.86%
						19.08	19.70		580	358	
	500 hours in HCFC-142b/Shrieve Zerol-150 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)										
	U-475 A2	22.5626	22.5838	0.094%	N/C	16.24	14.30		430	320	
						16.24	13.44	-11.15%	430	260	-32.48%
						16.24	15.55		430	291	
	Y-390 B2	22.5474	22.5876	0.178%	N/C	18.77	17.35		510	388	
						18.77	14.00	-16.16%	510	423	-6.80%
						18.77	15.86		510	615	
	ER-610 C2	25.6850	25.6985	0.053%	N/C	15.57	12.61		442	373	
						15.57	14.71	-12.57%	442	257	-22.25%
						15.57	13.52		442	401	
	Y-833 D2	21.3950	21.3943	-0.003%	N/C	12.04	12.33		578	413	
						12.04	12.10	-0.53%	578	383	-34.49%
						12.04	11.50		578	340	
	923 E2	22.5214	22.5443	0.102%	N/C	16.76	18.12		606	494	
						16.76	15.40	-14.24%	606	492	-24.42%
						16.76	9.60		606	388	
	ISO-800 F2	26.7352	26.7508	0.058%	N/C	19.08	14.66		580	401	
						19.08	13.11	-24.42%	580	402	-30.69%
						19.08	15.49		580	403	

500 HOURS in HCFC-142b/Shrieve Zerol-150 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	24.6363	24.7608	0.51%	N/C	13.32	15.39		746	728	
						13.32	14.73	13.11%	746	720	-2.73%
						13.32	15.08		746	729	
	Y-390 B1	23.4909	23.6404	0.64%	N/C	12.28	16.77		755	732	
						12.28	16.95	32.00%	755	733	-3.18%
						12.28	14.91		755	728	
	ER-610 C1	27.3926	27.4741	0.30%	N/C	12.73	11.73		734	731	
						12.73	15.31	0.13%	734	731	-5.54%
						12.73	11.20		734	618	
	Y-833 D1	22.2800	22.3163	0.16%	N/C	12.49	13.26		734	730	
						12.49	12.03	2.59%	734	732	-0.32%
						12.49	13.15		734	733	
	923 E1	30.9722	31.1378	0.53%	N/C	14.38	19.81		742	740	
						14.38	19.77	37.55%	742	729	-0.27%
						14.38	19.76		742	751	
	ISO-800 F1	28.1279	28.2408	0.40%	N/C	12.29	14.04		747	734	
						12.29	12.98	13.89%	747	732	-2.05%
						12.29	14.97		747	729	
	HCFC-142b/ Zerol-150 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)										
	U-475 A2	25.0416	25.0697	0.11%	N/C	13.32	11.52		746	696	
						13.32	12.73	-13.44%	746	725	-4.20%
						13.32	10.34		746	723	
	Y-390 B2	23.3467	23.4078	0.26%	N/C	12.28	12.87		755	737	
						12.28	13.24	-2.28%	755	739	-2.25%
						12.28	9.89		755	736	
	ER-610 C2	27.3419	27.3572	0.06%	N/C	12.73	12.74		734	735	
						12.73	13.25	-0.58%	734	734	-0.27%
						12.73	11.98		734	727	
	Y-833 D2	22.2687	22.2678	0.00%	N/C	12.49	10.27		734	727	
						12.49	10.79	-9.53%	734	729	-2.68%
						12.49	12.84		734	687	
	923 E2	35.4193	35.1903	-0.65%	N/C	14.38	13.11		742	723	
						14.38	12.28	-12.61%	742	748	-2.56%
						14.38	12.31		742	742	
	ISO-800 F2	28.8985	28.9118	0.05%		12.29	11.60		747	740	
					N/C	12.29	10.13	-10.52%	747	739	-1.00%
						12.29	11.26		747	740	

TWISTED PAIRS/WIRE C/WITH VARNISH-HCFC-142b/S hrieve Zerol-150 @ 260°F(127°C)

500 Hours in HCFC-142b/Schrieve Zerol-150 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER IMIDE POLYAMIDE	U-475 A1	23.7217	23.8012	0.335%	N/C	15.10	14.83		469	262	
						15.10	17.07	11.83%	469	293	-39.87%
						15.10	18.76		469	291	
	Y-390 B1	26.5622	26.6766	0.431%	N/C	18.24	19.99		473	337	
						18.24	15.33	-6.54%	473	386	-21.42%
						18.24	15.82		473	392	
	ER-610 C1	25.2719	25.3123	0.160%	N/C	14.53	17.00		494	243	
						14.53	18.09	17.37%	494	208	-52.23%
						14.53	16.07		494	257	
	Y-833 D1	22.9817	22.9877	0.026%	N/C	11.38	11.43		557	258	
						11.38	11.99	0.44%	557	231	-58.05%
						11.38	10.87		557	212	
	923 E1	26.4182	26.5482	0.492%	N/C	15.85	15.29		503	252	
						15.85	19.37	14.85%	503	302	-37.44%
						15.85	19.95		503	390	
	ISO-800 F1	25.2414	25.2910	0.197%	N/C	14.75	18.03		632	282	
						14.75	19.99	17.85%	632	440	-42.04%
						14.75	14.13		632	377	
	HCFC-142b/Schrieve Zerol-150 @ 260°F plus 24 hours @ 302°F(150°C)										
	U-475 A2	23.6830	23.7026	0.083%	N/C	15.10	15.85		469	238	
						15.10	13.63	-1.02%	469	240	-49.82%
						15.10	15.36		469	228	
	Y-390 B2	26.8138	26.8682	0.203%	N/C	18.24	17.79		473	351	
						18.24	19.99	-11.54%	473	390	-21.63%
						18.24	12.28		473	371	
	ER-610 C2	24.6321	24.6433	0.045%	N/C	14.53	16.42		494	193	
						14.53	14.00	4.52%	494	217	-57.62%
						14.53	15.14		494	218	
	Y-833 D2	22.1847	22.1817	-0.014%	N/C	11.38	10.84		557	252	
						11.38	11.72	-1.70%	557	235	-56.37%
						11.38	11.00		557	242	
	923 E2	26.8128	26.8513	0.144%	N/C	15.85	18.52		503	475	
						15.85	15.62	-2.19%	503	453	-14.25%
						15.85	12.37		503	366	
	ISO-800 F2	25.0562	25.0676	0.045%	N/C	14.75	18.57		632	348	
						14.75	16.87	20.34%	632	312	-44.25%
						14.75	17.81		632	397	

HELICAL COILS/WIRE A---HCFC-142b/Shrieve Zerol-150 oil @260°F(127°C)

500 HRS in HCFC-142b/Zerol-150@ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER	U-475 A1	40.7471	40.9618	0.527%	N/C	73.73	33.30	-51.37%
						73.73	43.90	
						73.73	30.37	
	Y-390 B1	39.3576	39.5541	0.499%	N/C	43.78	24.72	-34.72%
						43.78	31.30	
						43.78	29.72	
	ER-610 C1	39.7567	39.9316	0.440%	N/C	51.81	31.05	-36.11%
						51.81	31.55	
						51.81	36.70	
POLYAMIDE	Y-833 D1	37.8317	37.8575	0.068%	N/C	9.85	24.52	40.34%
						9.85	13.65	
						9.85	3.30	
	923 E1	39.9605	40.1409	0.451%	N/C	41.28	26.90	-32.88%
						41.28	29.57	
						41.28	26.65	
	ISO-800 F1	37.9463	38.0592	0.298%	N/C	45.01	27.55	-30.29%
						45.01	35.20	
						45.01	32.75	
500 HRS in HCFC-142b/Zerol-150 @ 260 F -> 24 HRS 302°F								
IMIDE	U-475 A2	40.6496	40.6994	0.123%	N/C	73.73	14.52	-84.50%
						73.73	11.85	
						73.73	11.00	
	Y-390 B2	39.3236	39.4160	0.235%	N/C	43.78	20.60	-67.68%
						43.78	broke	
						43.78	7.70	
	ER-610 C2	40.2241	40.2663	0.105%	N/C	51.81	11.15	-74.12%
						51.81	12.72	
						51.81	16.35	
Y-833 D2	38.8456	38.8225	-0.059%	N/C	9.85	3.90	-25.21%	
					9.85	9.20		
					9.85	9.00		
923 E2	40.9212	41.0126	0.223%	N/C	41.28	29.60	-44.99%	
					41.28	24.12		
					41.28	14.40		
ISO-800 F2	38.7395	38.7841	0.115%	N/C	45.01	28.52	-65.46%	
					45.01	10.32		
					45.01	7.80		

HELICAL COILS/WIRE B-HCFC-142b/Shrieve Zerol-150 Oil

500 HRS in HCFC-142b/Shrieve Zerol-150 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE EIMIDE POXY GLASS	U-475 A1	36.8378	37.1102	0.739%	N/C	40.14	39.62	-2.83%
						40.14	36.47	
						40.14	40.92	
	Y-390 B1	38.1826	38.5383	0.932%	N/C	36.12	43.27	12.21%
						36.12	40.35	
						36.12	37.97	
	ER-610 C1	38.3366	38.5658	0.598%	N/C	35.96	25.25	-14.61%
						35.96	33.42	
						35.96	33.45	
	Y-833 D1	36.8172	36.9987	0.493%	N/C	33.14	28.75	-18.03%
						33.14	23.72	
						33.14	29.02	
	923 E1	38.5331	38.7579	0.583%	N/C	40.52	35.05	-14.06%
						40.52	33.37	
						40.52	36.05	
	ISO-800 F1	38.0227	38.2062	0.483%	N/C	20.20	25.05	22.28%
						20.20	24.25	
						20.20	24.80	
500 HRS in HCFC-142b/Zerol-150 @ 260 F -> 24 HRS 302°F								
U-475 A2	36.9854	37.0456	0.163%	N/C	40.14	25.80	-30.54%	
					40.14	32.67		
					40.14	25.17		
Y-390 B2	38.2587	38.3474	0.232%	N/C	36.12	25.50	-28.02%	
					36.12	24.45		
					36.12	28.05		
ER-610 C2	37.6982	37.7559	0.153%	N/C	35.96	29.30	-24.14%	
					35.96	25.22		
					35.96	27.32		
Y-833 D2	36.7450	36.7774	0.088%	N/C	33.14	19.00	-46.42%	
					33.14	17.37		
					33.14	16.90		
923 E2	38.1830	38.2700	0.228%	N/C	40.52	27.37	-32.12%	
					40.52	26.27		
					40.52	28.87		
ISO-800 F2	37.5210	37.5780	0.152%	N/C	20.20	17.37	-14.75%	
					20.20	17.22		
					20.20	17.07		

HELICAL COILS/WIRE C-HCFC-142b/Shrieve Zerol-150 oil @ 260°F(127°C)

500 HRS in HCFC-142b/Shrieve Zerol-150 @ 260 F									
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE	
POLYESTER IMIDE POLYAMIDE	U-475 A1	38.1970	38.3834	0.488%	N/C	51.21	62.92	-7.41%	
						51.21	36.87		
						51.21	42.45		
	Y-390 B1	39.4390	39.6051	0.421%	N/C	50.72	25.55	-50.39%	
						50.72	23.87		
						50.72	26.07		
	ER-610 C1	38.0862	38.2452	0.417%	N/C	58.33	34.40	-47.13%	
						58.33	22.25		
						58.33	35.87		
	Y-833 D1	38.5008	38.4147	-0.224%	N/C	5.84	broken	62.67%	
						5.84	broken		
						5.84	9.50		
	923 E1	39.8348	40.0153	0.453%	N/C	49.26	20.92	-55.87%	
						49.26	25.02		
						49.26	19.27		
	ISO-800 F1	39.7158	39.8353	0.301%	N/C	36.08	26.10	-25.50%	
						36.08	25.27		
						36.08	29.27		
	500 HRS in HCFC-142b/Shrieve Zerol-150 @ 260 F-> 24 HRS 302°F								
	U-475 A2	37.3945	37.4482	0.144%	N/C	51.21	6.00	-81.16%	
						51.21	12.37		
						51.21	10.57		
	Y-390 B2	40.8246	40.9084	0.205%	N/C	50.72	12.90	-71.33%	
						50.72	8.60		
					50.72	22.12			
ER-610 C2	38.1005	38.1480	0.125%	N/C	58.33	9.90	-73.06%		
					58.33	11.82			
					58.33	25.42			
Y-833 D2	38.6826	38.5539	-0.333%	N/C	5.84	11.45	151.43%		
					5.84	18.95			
					5.84	13.65			
923 E2	39.8603	39.9482	0.221%	N/C	49.26	23.50	-49.88%		
					49.26	26.27			
					49.26	24.30			
ISO-800 F2	39.2767	39.3214	0.114%	N/C	36.08	30.20	-17.06%		
					36.08	32.90			
					36.08	26.67			

SINGLE MAG WIRE WITHOUT VARNISH-HCFC-142b/S hrieve Zerol-150 @ 260°F(127°C))

500 HRS in HCFC-142b/Zerol-150 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.6171	3.62	0.080%	N/C	
					YES
B1	3.3665	3.3756	0.270%	N/C	
					YES
C1	3.8304	3.8328	0.063%	N/C	
					YES
500 HRS in HCFC-142b/Zerol-150-> 302°F for 24 HRS					
A2	3.7416	3.7419	0.008%	N/C	
					YES
B2	3.3361	3.3362	0.003%	N/C	
					YES
C2	3.806	3.805	-0.026%	N/C	
					YES

SINGLE/WIRE A/WITH VARNISH--HCFC-142b/S hrieve Zerol-150 @ 260°F(127°C)

		500 HRS in HCFC-142b/Zerol-150 @ 260°F(127°C)					
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX	
POLYESTER IMIDE POLYAMIDE	U-475 A1	3.6729	3.6862	0.362%	N/C		
						YES	
	Y-390 B1	3.7529	3.7700	0.456%	N/C		
						NO	
	ER-610 C1	3.6807	3.6895	0.239%	N/C		
						YES	
	Y-833 D1	4.1939	4.1995	0.134%	N/C		
						YES	
	923 E1	3.9492	3.9684	0.486%	N/C		
						NO	
	ISO-800 F1	4.1289	4.1365	0.184%	N/C		
						NO	
	HCFC-142b/Zerol-150 @ 260°F -> 24 HRS @ 302F						
U-475 A2	3.7841	3.7874	0.087%	N/C			
					YES		
Y-390 B2	3.7604	3.7655	0.136%	N/C			
					NO		
ER-610 C2	3.6665	3.6680	0.041%	N/C			
					Yes		
Y-833 D2	4.2745	4.2758	0.030%	N/C			
					YES		
923 E2	3.9027	3.9099	0.184%	N/C			
					NO		
ISO-800 F2	4.0598	4.0644	0.113%	N/C			
					NO		

SINGLE/WIRE B/WITH VARNISH--HCFC-142b/S hrieve Zerol-150 oil @ 260°F(127°C)

500 HRS in HCFC-142b/Zerol-150 @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE EP OXY GLASS	U-475 A1	3.9290	3.9435	0.369%	N/C	NO
	Y-390 B1	3.9128	3.9375	0.631%	N/C	NO
	ER-610 C1	3.8421	3.8800	0.986%	N/C	YES
	Y-833 D1	3.8950	3.9027	0.198%	N/C	YES
	923 E1	4.2385	4.2631	0.580%	N/C	NO
	ISO-800 F1	3.8499	3.8647	0.384%	N/C	NO
	HCFC-142b/Zerol-150 @ 260°F(127°C)					
	U-475 A2	3.9529	3.9230	-0.756%	N/C	NO
	Y-390 B2	4.0279	4.0342	0.156%	N/C	NO
	ER-610 C2	3.8229	3.8235	0.016%	N/C	NO
	Y-833 D2	3.9713	3.9714	0.003%	N/C	YES
	923 E2	4.2179	4.2246	0.159%	N/C	NO
	ISO-800 F2	3.9105	3.9132	0.069%	N/C	NO

SINGLE/WIRE C/WITH VARNISH--HCFC-142b/S .nrieve Zerol-150 oil 260°F(127°C)

500 HRS in HCFC-142b/Zerol-150 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE	U-475 A1	4.4284	4.4432	0.334%	N/C	YES
	Y-390 B1	3.7941	3.8093	0.401%	N/C	NO
	ER-610 C1	3.6975	3.7018	0.116%	N/C	YES
	Y-833 D1	4.1668	4.1720	0.125%	N/C	NO
	923 E1	3.8764	3.8931	0.431%	N/C	NO
	ISO-800 F1	3.7256	3.7340	0.225%	N/C	NO
	HCFC-142b/Zerol-150 -> 24 HRS @ 302°F					
	U-475 A2	4.3443	4.3472	0.067%	N/C	NO
	Y-390 B2	3.8380	3.8424	0.115%	N/C	NO
	ER-610 C2	3.7793	3.7829	0.095%	N/C	YES
	Y-833 D2	4.2620	4.2631	0.026%	N/C	YES
	923 E2	4.0466	4.0524	0.143%	N/C	NO
	ISO-800 F2	3.6088	3.6113	0.069%	N/C	NO

Varnish Disks----HCFC-142b/S hrieve Zerol-150 Oil

500 HRS IN R-142b/Zerol-150 Oil @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.4993	2.6242	5.00%	N/C	N/C
Y-390 B1	2.2531	2.3947	6.28%	slightly warped	N/C
ER-610 C1	2.4949	2.7669	10.90%	Rough Surface	N/C
Y-833 D1	1.8570	1.9812	6.69%	Slightly warped	N/C
923 E1	1.3171	1.3941	5.85%	Rough surface	N/C
ISO-800 F1	1.3864	1.3738	-0.91%	slightly warped	N/C
R-142b/Zerol-150 at --->24 hour at 302°F.					
U-475 A2	2.0993	2.1372	1.81%	darkened	N/C
Y-390 B2	1.6439	1.6768	2.00%	slightly warped darkened	N/C
ER-610 C2	2.3679	2.4183	2.13%	darkened	N/C
Y-833 D2	2.2175	2.3144	4.37%	slightly warped pockets	N/C
923 E2	1.5177	1.5568	2.58%	Rough surface darkened	N/C
ISO-800 F2	1.2454	1.1927	-4.23%	slightly warped darkened	N/C

SHEET INSULATION-HCFC-142b/S Schieve Zerol-150 oil @ 260°F(127°C)

500 HRS in HCFC-142b/Schrieve Zerol-150 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	7.1874	7.6321	6.19%	0.386	126.00	21	17.4	15.54	
				0.360	114.40	21	17.4	15.13	-12.17%
				0.403	128.40	21	17.4	15.17	
DA/MY/DA B1	7.3065	7.3786	0.99%	0.390	95.40	21	13.7	11.65	
				0.450	108.90	21	13.7	11.52	-17.69%
				0.410	91.75	21	13.7	10.66	
MYLAR MO C1	4.0177	4.1036	2.14%	0.448	68.45	10	21.7	15.28	
				0.415	63.20	10	21.7	15.23	-27.69%
				0.422	69.90	10	21.7	16.56	
NO 410 D1	3.6005	3.9841	10.65%	0.478	85.20	10	18.7	17.82	
				0.541	96.10	10	18.7	17.76	-5.58%
				0.521	90.55	10	18.7	17.38	
NO MI 418 E1	3.6478	4.3458	19.13%	0.493	30.30	10	7.5	6.15	
				0.465	28.05	10	7.5	6.03	-18.63%
				0.504	30.90	10	7.5	6.13	
MEL 228 F1	4.1146	4.2350	2.93%	0.430	65.75	10	21.7	15.29	
				0.415	63.05	10	21.7	15.19	-29.78%
				0.485	73.85	10	21.7	15.23	
500 HRS in HCFC-142b/Schieve Zerol-150 @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	8.0851	8.1775	1.14%	0.465	119.00	21	17.4	12.19	
				0.495	68.60	21	17.4	6.60	-41.87%
				0.404	98.05	21	17.4	11.56	
DA/MY/DA B2	7.0746	6.9093	-2.34%	0.396	70.00	21	13.7	8.42	
				0.364	27.55	21	13.7	3.60	-39.75%
				0.395	105.70	21	13.7	12.74	
MYLAR MO C2	3.8473	3.8253	-0.57%	0.455	73.20	10	21.7	16.09	
				0.484	80.95	10	21.7	16.73	-24.35%
				0.362	59.50	10	21.7	16.44	
NOMEX 410 D2	3.6888	3.8321	3.88%	0.500	95.40	10	18.7	19.08	
				0.523	102.20	10	18.7	19.54	2.72%
				0.481	91.40	10	18.7	19.00	
NO/MI 418 E2	3.7053	3.9156	5.68%	0.502	27.05	10	7.5	5.39	
				0.503	29.45	10	7.5	5.85	-24.70%
				0.500	28.50	10	7.5	5.70	
MEL 228 F2	4.1397	4.1320	-0.19%	0.405	69.30	10	21.7	17.11	
				0.423	72.35	10	21.7	17.10	-21.04%
				0.484	83.20	10	21.7	17.19	

SHEET INSULATION-HCFC-142b/S brievé Zerol-150 oil @ 260°F(127°C)

Results after 500 hour exposure								
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	VISUAL EXP
NO/MY/NO A1	0.44	11.0%	20.0%		>18.97	flash		Major delamination N/C appearance
	0.37	9.3%	20.0%	-49.4%	>18.97	flash	flash	
	0.38	9.5%	20.0%		>18.97	flash		
DA/MY/DA B1	0.35	17.5%	46.0%		>15.27	flash		Discolored yellowed slightly warped
	0.34	17.0%	46.0%	-64.5%	>15.27	flash	flash	
	0.29	14.5%	46.0%		>15.27	flash		
MYLAR MO C1	0.74	37.0%	131.0%		>14.91	flash		N/C
	0.74	37.0%	131.0%	-72.0%	>14.91	flash	flash	
	0.72	36.0%	131.0%		>14.91	flash		
NO 410 D1	0.27	6.8%	17.0%		10.67	10.53		N/C
	0.33	8.3%	17.0%	-56.4%	10.67	10.72	0.4%	
	0.29	7.3%	17.0%		10.67	10.90		
NO MI 418 E1	0.03	0.8%	4.0%		10.23	11.27		N/C
	0.04	1.0%	4.0%	-79.2%	10.23	11.47	flash	
	0.03	0.8%	4.0%		10.23	11.14		
MEL 228 F1	0.34	17.0%	160.0%		>14.22	flash		Originally white lightly yellowed
	0.34	17.0%	160.0%	-89.2%	>14.22	flash	flash	
	0.36	18.0%	160.0%		>14.22	flash		
After 500 hour exposure plus 24 hour air bake at 150°C(302°F)								
NO/MY/NO A2	0.12	3.0%	20.0%		>18.97	flash		Major delamination
	0.07	1.8%	20.0%	-87.5%	>18.97	flash	flash	
	0.11	2.8%	20.0%		>18.97	flash		
DA/MY/DA B2	0.05	2.5%	46.0%		>15.27	flash		darkened slightly warped
	0.03	1.5%	46.0%	-84.4%	>15.27	flash	flash	
	0.35	17.5%	46.0%		>15.27	flash		
MYLAR MO C2	0.16	8.0%	131.0%		>14.91	flash		slightly darkened yellowed
	0.14	7.0%	131.0%	-94.4%	>14.91	flash	flash	
	0.14	7.0%	131.0%		>14.91	flash		
NOMEX 410 D2	0.33	8.3%	17.0%		10.67	11.01		N/C
	0.39	9.8%	17.0%	-48.5%	10.67	10.29	3.4%	
	0.33	8.3%	17.0%		10.67	11.79		
NO/MI 418 E2	0.05	1.3%	4.0%		10.23	10.53		N/C
	0.06	1.5%	4.0%	-64.6%	10.23	10.45	1.1%	
	0.06	1.5%	4.0%		10.23	10.05		
MEL 228 F2	0.14	7.0%	160.0%		>14.22	flash		slightly darkened yellowed
	0.14	7.0%	160.0%	-95.6%	>14.22	flash	flash	
	0.14	7.0%	160.0%		>14.22	flash		

500 HRS in HCFC-142b/Shrieve Zerol-150 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.6060	1.6042	-0.11%	39.02	58.55		0.12	6.00%	N/C
				39.02	61.45	49.51%	0.07	3.50%	
				39.02	55.02		0.05	2.50%	
B1 Polyester	0.6950	0.7046	1.38%	56.12	50.25		0.46	23.00%	N/C
				56.12	53.60	-7.52%	0.56	28.00%	
				56.12	51.85		0.49	24.50%	
C1 Permacel	1.6322	1.7563	7.60%	88.50	67.40		0.11	5.50%	
				88.50	102.30	-1.07%	0.15	7.50%	darkened
				88.50	92.97		0.15	7.50%	
500 HRS in HCFC-142b/Shrieve Zerol-150 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.5441	1.5429	-0.08%	39.02	55.77		0.06	3.00%	N/C
				39.02	65.72	47.16%	0.07	3.50%	
				39.02	50.77		0.06	3.00%	
B2 Polyester	0.6278	0.6205	-1.16%	56.12	50.05		0.51	25.50%	N/C
				56.12	50.70	-9.66%	0.50	25.00%	
				56.12	51.35		0.53	26.50%	
C2 Permacel	1.4392	1.3409	-6.83%	88.50	65.65		0.13	6.50%	
				88.50	88.25	-16.15%	0.11	5.50%	Darkened
				88.50	68.72		0.10	5.00%	

SLEEVING--HCFC-142b/Shrieve Zerol-150 oil @ 260°F(127°C)

500 HRS in HCFC-142b/Schrieve Zerol-150 oil @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5316	0.5947	11.87%	N/C
B1 MYLAR	0.4937	0.5077	2.84%	N/C
C1 NO/MY	0.3941	0.4156	5.46%	N/C
HCFC-142b/Shrieve Zerol-150 oil @ 260°F plus 24 hrs @ 302°F				
A2 NOMEX	0.5472	0.5544	1.32%	N/C
B2 MYLAR	0.4505	0.4421	-1.86%	darkened some pockets in mylar, pulled away
C2 NO/MY	0.4069	0.4018	-1.25%	N/C some pockets where mylar ppulled away.

TIE CORD--HCFC-142b/Schrieve Zerol-150 oil @ 260°F(127°C)

500 HRS IN R-142b/Shrieve Zerol-150 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2530	0.2535	0.20%	N/C	28.36	28.32		0.42	21.0%
					28.36	32.80	15.27%	0.47	23.5%
					28.36	36.95		0.59	29.5%
500 HRS IN R-142b/Schrieve Zerol-150 -> 24 HRS @ 302°F									
A2	0.2622	0.2665	1.640%	N/C	28.36	29.35		0.41	20.5%
					28.36	31.92	9.24%	0.47	23.5%
					28.36	31.67		0.49	24.5%

LEAD WIRE INSULATION-HCFC-142b/S hrieve Zerol-150 @ 260°F(127°C)

500 HRS IN HCFC-142b/S hrieve Zerol-150 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.2530	4.3681	2.71%	N/C	9.61	11.23	
A1					9.61	12.60	27.19%
					9.61	12.84	
DTMD	3.9554	4.0779	3.10%	N/C	9.95	7.50	
B1					9.95	8.76	-13.57%
					9.95	9.54	
HCFC-142b/S hrieve Zerol-150 @ 260°F -> 24 HRS @ 302°F							
DMD	4.3640	4.4051	0.94%	N/C	9.61	10.96	
A2					9.61	12.23	29.69%
					9.61	14.20	
DTMD	4.1186	4.1495	0.75%	N/C	9.95	9.04	
B2					9.95	9.78	-7.20%
					9.95	8.88	

Appendix E

**Experimental Data for HFC-152a/Shrieve
Zerol-150 Exposure at 127°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-152a/Shrieve Zerol-150 oil @260°F(127°C)

500 hours in HFC-152a/Shrieve Zerol-150 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	22.0238	22.0404	0.075%	N/C	576	559		15.80	14.33	
					576	532	-13.1%	15.80	15.81	-4.9%
					576	411		15.80	14.96	
B1	24.7692	24.8485	0.320%	N/C	736	735		11.62	8.65	
					736	733	-0.3%	11.62	12.33	-4.3%
					736	733		11.62	12.39	
C1	25.7615	25.7765	0.058%	N/C	579	578		16.58	17.88	
					579	573	-1.0%	16.58	17.08	7.1%
					579	568		16.58	18.31	
500 hours in HFC-152a/Shrieve Zerol-150 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	21.45	21.2715	-0.832%	N/C	576	567		15.80	13.78	
					576	532	-3.8%	15.80	15.62	-9.2%
					576	564		15.80	13.66	
B2	25.2056	25.2265	0.083%	N/C	736	736		11.62	11.16	
					736	727	-0.5%	11.62	11.24	-2.7%
					736	735		11.62	11.51	
C2	25.1082	25.1155	0.029%	N/C	579	463		16.58	11.00	
					579	554	-8.9%	16.58	15.29	-17.9%
					579	566		16.58	14.57	

500 hours in HFC-152a/Schrive Zerol-150 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR·WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MIDE	U-475 A1	22.8613	22.8715	0.045%	N/C	16.24	19.90		430	376	
						16.24	18.40	16.09%	430	414	-1.01%
						16.24	18.26		430	487	
	Y-390 B1	21.7743	21.8715	0.446%	N/C	18.77	9.41		510	479	
						18.77	19.29	-27.90%	510	566	4.64%
						18.77	11.90		510	556	
	ER-610 C1	26.2123	26.2466	0.131%	N/C	15.57	11.34		442	321	
						15.57	16.85	-6.25%	442	367	-20.14%
						15.57	15.60		442	371	
	Y-833 D1	21.8967	21.8953	-0.006%	N/C	12.04	12.67		578	573	
						12.04	11.85	-1.50%	578	453	-10.84%
						12.04	11.06		578	520	
	923 E1	22.9409	23.0006	0.260%	N/C	16.76	14.41		606	561	
						16.76	16.40	-17.84%	606	578	-5.12%
						16.76	10.50		606	586	
	ISO-800 F1	21.9077	21.9487	0.187%	N/C	19.08	15.51		580	555	
						19.08	13.79	-20.68%	580	569	-3.05%
						19.08	16.10		580	563	
500 hours in HFC-152a/Shrieve Zerol-150 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
IMIDE	U-475 A2	22.6559	22.6650	0.040%	N/C	16.24	10.18		430	478	
						16.24	14.01	-24.22%	430	468	5.35%
						16.24	12.73		430	413	
	Y-390 B2	21.7109	21.7309	0.092%	N/C	18.77	9.32		510	583	
						18.77	12.79	-29.82%	510	477	7.71%
						18.77	17.41		510	588	
	ER-610 C2	25.7882	25.7696	-0.072%	N/C	15.57	15.44		442	272	
						15.57	14.11	-4.82%	442	286	-34.39%
						15.57	14.91		442	312	
	Y-833 D2	22.2179	22.2108	-0.032%	N/C	12.04	11.84		578	458	
						12.04	10.98	-7.09%	578	433	-24.34%
						12.04	10.74		578	421	
	923 E2	23.0446	23.0678	0.101%	N/C	16.76	19.99		606	613	
						16.76	9.99	-10.04%	606	516	-8.64%
						16.76	15.25		606	532	
	ISO-800 F2	21.6893	21.6992	0.046%	N/C	19.08	8.37		580	502	
						19.08	11.73	-40.85%	580	545	-8.05%
						19.08	13.76		580	553	

500 HOURS in HFC-152a/Shrieve Zerol-150 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MID E I M I D E P O X Y G L A S S	U-475 A1	25.1300	25.2080	0.31%	N/C	13.32	13.21		746	729	
						13.32	12.40	-5.73%	746	731	-2.06%
						13.32	12.06		746	732	
	Y-390 B1	23.4105	23.5353	0.53%	N/C	12.28	8.31		755	667	
						12.28	11.72	-15.07%	755	751	-4.72%
						12.28	11.26		755	740	
	ER-610 C1	22.1904	22.2091	0.08%	N/C	12.73	10.78		734	735	
						12.73	9.40	-23.57%	734	729	-3.81%
						12.73	9.01		734	654	
	Y-833 D1	21.1090	21.1242	0.07%	N/C	12.49	9.82		734	727	
						12.49	8.24	-35.76%	734	727	-0.32%
						12.49	6.01		734	741	
POLYAMIDE MID E I M I D E P O X Y G L A S S	923 E1	26.3348	26.4272	0.35%	N/C	14.38	9.30		742	736	
						14.38	16.34	-3.45%	742	732	-0.40%
						14.38	16.01		742	749	
	ISO-800 F1	28.7632	28.8543	0.32%	N/C	12.29	12.97		747	732	
						12.29	13.73	9.03%	747	741	-1.52%
						12.29	13.50		747	734	
	HFC-152a/ Zerol-150 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)										
	U-475 A2	25.3920	25.3974	0.02%	N/C	13.32	12.61		746	731	
						13.32	10.90	-15.39%	746	731	-1.83%
						13.32	10.30		746	735	
	Y-390 B2	23.5808	23.6052	0.10%	N/C	12.28	11.78		755	739	
						12.28	11.90	-3.85%	755	739	-2.12%
						12.28	11.74		755	736	
	ER-610 C2	22.5380	22.5295	-0.04%	N/C	12.73	11.63		734	733	
						12.73	11.66	-6.70%	734	731	-0.36%
						12.73	12.34		734	730	
	Y-833 D2	22.1914	22.1895	-0.01%	N/C	12.49	10.10		734	731	
						12.49	12.10	-8.11%	734	730	-0.59%
						12.49	12.23		734	728	
	923 E2	26.6833	26.7014	0.07%	N/C	14.38	15.76		742	734	
						14.38	14.10	0.95%	742	740	-1.08%
						14.38	13.69		742	732	
	ISO-800 F2	29.0483	29.0681	0.07%	N/C	12.29	11.66		747	749	
						12.29	11.76	-3.96%	747	742	-0.20%
						12.29	11.99		747	737	

500 Hours in HFC-152a/Schrieve Zerol-150 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE POLYAMIDE	U-475 A1	24.2691	24.3104	0.170%	N/C	15.10	11.99		469	359	
						15.10	11.34	-25.17%	469	456	-2.99%
						15.10	10.57		469	550	
	Y-390 B1	25.0458	25.1178	0.287%	N/C	18.24	3.71		473	522	
						18.24	8.64	-40.90%	473	569	13.04%
						18.24	19.99		473	513	
	ER-610 C1	26.2063	26.2349	0.109%	N/C	14.53	15.30		494	390	
						14.53	13.06	-0.02%	494	387	-23.08%
						14.53	15.22		494	363	
	Y-833 D1	26.4181	26.4070	-0.042%	N/C	11.38	14.34		557	490	
						11.38	14.78	20.71%	557	419	-10.89%
						11.38	12.09		557	580	
	923 E1	17.3814	17.4205	0.225%	N/C	15.85	16.94		503	515	
						15.85	18.44	11.61%	503	563	7.16%
						15.85	N/A		503	N/A	
	ISO-800 F1	22.3755	22.4164	0.183%	N/C	14.75	18.34		632	601	
						14.75	19.82	24.05%	632	505	-9.49%
						14.75	16.73		632	610	
HFC-152a/S hrieve Zerol-150 @ 260°F plus 24 hours @ 302°F(150°C)											
U-475 A2	24.2312	24.2389	0.032%	N/C	15.10	14.12		469	548		
					15.10	14.66	-1.81%	469	427	-3.55%	
					15.10	15.70		469	382		
Y-390 B2	26.3111	26.3358	0.094%	N/C	18.24	10.94		473	640		
					18.24	14.12	-18.39%	473	443	6.55%	
					18.24	15.65		473	429		
ER-610 C2	25.9247	25.9297	0.019%	N/C	14.53	17.79		494	309		
					14.53	16.14	12.02%	494	365	-26.79%	
					14.53	14.90		494	411		
Y-833 D2	26.1411	26.1104	-0.117%	N/C	11.38	16.73		557	403		
					11.38	15.63	31.52%	557	540	-13.41%	
					11.38	12.54		557	504		
923 E2	24.4687	24.4817	0.053%	N/C	15.85	13.47		503	388		
					15.85	12.77	-17.22%	503	428	-17.16%	
					15.85	N/A		503	434		
ISO-800 F2	22.4531	22.4634	0.046%	N/C	14.75	17.43		632	603		
					14.75	13.50	5.92%	632	686	2.27%	
					14.75	15.94		632	650		

HELICAL COILS/WIRE A---HFC-152a/Shrieve Zerol-150 oil @260°F(127°C)

500 HRS in HFC-152a/Zerol-150@ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER	U-475 A1	40.1082	40.2342	0.314%	N/C	73.73	32.90	-64.49%
						73.73	21.65	
						73.73	24.00	
	Y-390 B1	39.1315	39.2356	0.266%	N/C	43.78	24.62	-42.23%
						43.78	27.60	
						43.78	23.65	
	ER-610 C1	39.1374	39.2436	0.271%	N/C	51.81	22.20	-47.47%
						51.81	24.25	
						51.81	35.20	
	Y-833 D1	38.5863	38.5725	-0.036%	N/C	9.85	19.05	78.24%
						9.85	11.32	
						9.85	22.30	
	923 E1	40.1270	40.2713	0.360%	N/C	41.28	34.90	-20.22%
						41.28	33.35	
						41.28	30.55	
	ISO-800 F1	37.5610	37.6263	0.174%	N/C	45.01	42.85	-7.74%
						45.01	40.20	
						45.01	44.65	
500 HRS in HFC-152a/Zerol-150 @ 260 F -> 24 HRS 302°F								
IMIDE	U-475 A2	40.0238	40.0674	0.109%	N/C	73.73	43.20	-42.80%
						73.73	54.25	
						73.73	30.10	
	Y-390 B2	39.0847	39.1312	0.119%	N/C	43.78	22.05	-48.42%
						43.78	18.60	
						43.78	27.10	
	ER-610 C2	39.9705	39.9950	0.061%	N/C	51.81	18.55	-70.08%
						51.81	17.60	
						51.81	10.35	
	Y-833 D2	38.8992	38.8374	-0.159%	N/C	9.85	21.15	79.26%
						9.85	11.90	
						9.85	19.92	
	923 E2	39.8071	39.8618	0.137%	N/C	41.28	16.25	-61.67%
						41.28	12.60	
						41.28	18.62	
	ISO-800 F2	38.2487	38.2610	0.032%	N/C	45.01	40.57	-1.36%
						45.01	44.97	
						45.01	47.65	

		500 HRS in HFC-152a/Shrieve Zerol-150 @ 260 F						
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	38.2779	38.4450	0.437%	N/C	40.14	33.77	-8.50%
						40.14	38.07	
						40.14	38.35	
	Y-390 B1	38.5049	38.7153	0.546%	N/C	36.12	41.10	5.70%
						36.12	39.57	
						36.12	33.87	
	ER-610 C1	37.3353	37.4632	0.343%	N/C	35.96	31.22	-1.04%
						35.96	35.52	
						35.96	40.02	
	Y-833 D1	35.9631	36.0134	0.140%	N/C	33.14	25.32	-31.63%
						33.14	19.25	
						33.14	23.40	
	923 E1	38.4021	38.5380	0.354%	N/C	40.52	40.12	-5.64%
						40.52	39.72	
						40.52	34.87	
	ISO-800 F1	37.6500	37.7471	0.258%	N/C	20.20	20.57	-9.46%
						20.20	18.30	
						20.20	16.00	
		500 HRS in HFC-152a/Zerol-150 @ 260 F -> 24 HRS 302°F						
GLASS	U-475 A2	37.5655	37.6083	0.114%	N/C	40.14	29.17	-25.39%
						40.14	32.17	
						40.14	28.50	
	Y-390 B2	36.9782	37.0420	0.173%	N/C	36.12	30.22	-12.75%
						36.12	31.85	
						36.12	32.47	
	ER-610 C2	39.1917	39.2245	0.084%	N/C	35.96	35.52	-13.09%
						35.96	30.07	
						35.96	28.17	
	Y-833 D2	36.5141	36.5203	0.017%	N/C	33.14	17.72	-39.23%
						33.14	25.75	
						33.14	16.95	
	923 E2	38.0774	38.1289	0.135%	N/C	40.52	30.50	-20.78%
						40.52	32.55	
						40.52	33.25	
	ISO-800 F2	37.4183	37.4360	0.047%	N/C	20.20	7.35	-25.51%
						20.20	19.82	
						20.20	17.97	

HELICAL COILS/WIRE C-HFC-152a/Shrieve Zerol-150 oil @ 260°F(127°C)

500 HRS in HFC-152a/Shrieve Zerol-150 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTERIMIDE POLYAMIDEIMIDE	U-475 A1	38.8832	39.0090	0.324%	N/C	51.21	21.75	-54.53%
						51.21	27.05	
						51.21	21.05	
	Y-390 B1	40.2107	40.3165	0.263%	N/C	50.72	24.17	-53.48%
						50.72	25.12	
						50.72	21.50	
	ER-610 C1	36.3465	36.4387	0.254%	N/C	58.33	20.87	-52.33%
						58.33	43.67	
						58.33	18.87	
	Y-833 D1	38.1322	38.0246	-0.282%	N/C	5.84	broken	89.21%
						5.84	broken	
						5.84	11.05	
	923 E1	40.0291	40.1770	0.369%	N/C	49.26	25.15	-49.36%
						49.26	24.92	
						49.26	24.77	
	ISO-800 F1	39.6188	39.6878	0.174%	N/C	36.08	34.25	23.57%
						36.08	43.20	
						36.08	56.30	
500 HRS in HFC-152a/Shrieve Zerol-150 @ 260 F-> 24 HRS 302°F								
POLYAMIDEIMIDE	U-475 A2	37.5920	37.6256	0.089%	N/C	51.21	24.05	-46.16%
						51.21	27.30	
						51.21	31.37	
	Y-390 B2	40.0541	40.0987	0.111%	N/C	50.72	32.95	-51.09%
						50.72	18.60	
						50.72	22.87	
	ER-610 C2	37.1487	37.1738	0.068%	N/C	58.33	47.75	-24.10%
						58.33	58.97	
						58.33	26.10	
	Y-833 D2	37.6700	37.5218	-0.393%	N/C	5.84	16.22	144.81%
						5.84	11.42	
						5.84	15.25	
	923 E2	40.1700	40.2287	0.146%	N/C	49.26	24.25	-51.94%
						49.26	22.80	
						49.26	23.97	
	ISO-800 F2	39.7189	39.7377	0.047%	N/C	36.08	54.27	46.07%
						36.08	49.67	
						36.08	54.17	

SINGLE MAG WIRE WITHOUT VARNISH-HFC-152a/S hrieve Zerol-150 @ 260°F(127°C))

500 HRS in HFC-152a/Zerol-150 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.8043	3.8086	0.113%	N/C	
					YES
B1	3.585	3.5983	0.371%	N/C	
					YES
C1	3.6914	3.6956	0.114%	N/C	
					YES
500 HRS in HCFC-152a/Zerol-150-> 302°F for 24 HRS					
A2	3.785	3.7891	0.108%	N/C	
					YES
B2	3.7148	3.72	0.140%	N/C	
					YES
C2	3.6329	3.6376	0.129%	N/C	
					YES

SINGLE/WIRE A/WITH VARNISH--HFC-152A/S retrieve Zerol-150 oil 260°F(127°C)

		500 HRS in HFC-152a/Zerol-150 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX		
POLYESTER POLYAMIDE IMIDE	U-475 A1	3.7634	3.7692	0.154%	N/C			
						NO		
	Y-390 B1	3.8171	3.8281	0.288%	N/C			
						NO		
	ER-610 C1	3.7437	3.7468	0.083%	N/C			
						YES		
	Y-833 D1	4.0218	4.0233	0.037%	N/C			
						YES		
	923 E1	3.8006	3.8145	0.366%	N/C			
						NO		
	ISO-800 F1	3.9367	3.9430	0.160%	N/C			
						NO		
	HFC-152a/Zerol-150 -> 24 HRS @ 302°F							
	U-475 A2	3.6633	3.6636	0.008%	N/C			
						NO		
Y-390 B2	3.8383	3.8412	0.076%	N/C				
					NO			
ER-610 C2	3.7610	3.7608	-0.005%	N/C				
					YES			
Y-833 D2	4.0131	4.0171	0.100%	N/C				
					YES			
923 E2	3.7855	3.7791	-0.169%	N/C				
					NO			
ISO-800 F2	3.9280	3.9307	0.069%	N/C				
					NO			

500 HRS in HFC-152a/Zerol-150 @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE EPOXY GLASS	U-475 A1	4.0484	4.0585	0.249%	N/C	NO
	Y-390 B1	4.1182	4.1324	0.345%	N/C	NO
	ER-610 C1	3.8758	3.8793	0.090%	N/C	YES
	Y-833 D1	3.9858	3.9899	0.103%	N/C	YES
	923 E1	3.9592	3.9785	0.487%	N/C	NO
	ISO-800 F1	3.8137	3.8211	0.194%	N/C	NO
	HFC-152a/Zerol-150 @ 260°F(127°C)					
	U-475 A2	3.9944	3.9941	-0.008%	N/C	NO
	Y-390 B2	4.1147	4.1182	0.085%	N/C	NO
	ER-610 C2	3.9356	3.9358	0.005%	N/C	Yes
	Y-833 D2	3.9777	3.9792	0.038%	N/C	NO
	923 E2	3.8719	3.8779	0.155%	N/C	NO
	ISO-800 F2	3.8188	3.8192	0.010%	N/C	NO

SINGLE/WIRE C/WITH VARNISH--HFC-152a/S hrieve Zerol-150 @ 260°F(127°C)

		500 HRS in HFC-152a/Zerol-150 @ 260°F(127°C)					
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX	
POLYESTERIMIDE	U-475 A1	4.4751	4.4873	0.273%	N/C		
						YES	
	Y-390 B1	3.9869	3.9984	0.288%	N/C		
						NO	
	ER-610 C1	3.6935	3.6977	0.114%	N/C		
						YES	
	Y-833 D1	3.5209	3.5261	0.148%	N/C		
						No	
	923 E1	3.9136	3.9259	0.314%	N/C		
						NO	
	ISO-800 F1	3.8411	3.8484	0.190%	N/C		
						NO	
	HFC-152a/Zerol-150 @ 260°F -> 24 HRS @ 302F						
U-475 A2	3.7035	3.7100	0.176%	N/C			
					No		
Y-390 B2	4.0239	4.0302	0.157%	N/C			
					NO		
ER-610 C2	3.6470	3.6467	-0.008%	N/C			
					Yes		
Y-833 D2	3.5345	3.5332	-0.037%	N/C			
					YES		
923 E2	4.0264	4.0310	0.114%	N/C			
					NO		
ISO-800 F2	3.8749	3.8770	0.054%	N/C			
					NO		

500 HRS IN R-152a/Zerol-150 Oil @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.1071	2.2036	4.58%	N/C	N/C
Y-390 B1	2.1900	2.2268	1.68%	slightly warped	N/C
ER-610 C1	2.2804	2.4354	6.80%	Rough Surface	N/C
Y-833 D1	2.4317	2.4140	-0.73%	Slightly warped	N/C
923 E1	2.0832	2.1321	2.35%	Rough surface	N/C
ISO-800 F1	1.6363	1.5958	-2.48%	slightly warped	N/C
R-152a/Zerol-150 at --->24 hour at 302°F.					
U-475 A2	2.4634	2.4599	-0.14%	darkened	N/C
Y-390 B2	2.0590	2.0363	-1.10%	slightly warped	N/C
ER-610 C2	2.0662	2.1055	1.90%	darkened	N/C
				Rough Surface	
Y-833 D2	2.1614	2.0672	-4.36%	slightly warped pockets	N/C
923 E2	2.4001	2.3837	-0.68%	Rough surface darkened	N/C
ISO-800 F2	1.4936	1.4328	-4.07%	slightly warped darkened	N/C

SHEET INSULATION-HFC-152a/Schrieve Zerol-150 oil @ 260°F(127°C)

500 HRS in HFC-152a/Schrieve Zerol-150 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	%CHANGE TENSILE
NO/MY/NO A1	7.6582	8.1153	5.97%	0.456	96.65	21	17.4	10.09	
				0.490	127.20	21	17.4	12.36	-37.59%
				0.456	96.95	21	17.4	10.12	
DA/MY/DA B1	7.6437	7.6283	-0.20%	0.318	81.05	21	13.7	12.14	
				0.491	98.80	21	13.7	9.58	-21.61%
				0.479	105.60	21	13.7	10.50	
MYLAR MO C1	3.6947	3.7124	0.48%	0.385	56.10	10	21.7	14.57	
				0.475	71.95	10	21.7	15.15	-33.27%
				0.493	67.65	10	21.7	13.72	
NO 410 D1	3.7122	4.0842	10.02%	0.438	78.00	10	18.7	17.81	
				0.513	88.20	10	18.7	17.19	-4.33%
				0.496	92.60	10	18.7	18.67	
NO MI 418 E1	3.7832	4.3420	14.77%	0.490	27.70	10	7.5	5.65	
				0.507	29.75	10	7.5	5.87	-23.06%
				0.525	30.40	10	7.5	5.79	
MEL 228 F1	4.2582	4.3500	2.16%	0.406	61.15	10	21.7	15.06	
				0.460	70.05	10	21.7	15.23	-27.69%
				0.476	79.90	10	21.7	16.79	
500 HRS in HFC-152a/Schieve Zerol-150 @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	7.7568	7.9433	2.40%	0.442	103.60	21	17.4	11.16	
				0.425	101.90	21	17.4	11.42	-36.32%
				0.448	100.30	21	17.4	10.66	
DA/MY/DA B2	7.1430	6.9705	-2.41%	0.386	33.95	21	13.7	4.19	
				0.490	64.40	21	13.7	6.26	-63.83%
				0.402	37.30	21	13.7	4.42	
MYLAR MO C2	3.7200	3.6844	-0.96%	0.394	65.35	10	21.7	16.59	
				0.381	59.80	10	21.7	15.70	-24.95%
				0.368	61.00	10	21.7	16.58	
NOMEX 410 D2	3.8005	3.9461	3.83%	0.444	80.20	10	18.7	18.06	
				0.492	90.80	10	18.7	18.46	-0.11%
				0.520	101.50	10	18.7	19.52	
NO/MI 418 E2	3.7850	4.0056	5.83%	0.472	24.70	10	7.5	5.23	
				0.480	28.90	10	7.5	6.02	-24.53%
				0.496	28.40	10	7.5	5.73	
MEL 228 F2	4.0835	4.0826	-0.02%	0.431	74.90	10	21.7	17.38	
				0.495	84.25	10	21.7	17.02	-21.07%
				0.431	73.20	10	21.7	16.98	

SHEET INSULATION-HFC-152a/S retrieve Zerol-150 oil @ 260°F(127°C)

500 HRS in HFC-152a/S retrieve Zerol-150 @ 260 F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A1	0.11	2.8%	20.0%		>18.97	>16.76		Major delamination N/C appearance mylar delamination
	0.13	3.3%	20.0%	-85.0%	>19.97	>17.30	flash	
	0.12	3.0%	20.0%		>18.97	>17.41		
DA/MY/DA B1	0.34	17.0%	46.0%		>15.27	>15.63		Discolored yellowed slightly warped
	0.08	4.0%	46.0%	-78.6%	>15.27	>15.86	flash	
	0.17	8.5%	46.0%		>15.27	>14.68		
MYLAR MO C1	0.24	12.0%	131.0%		>14.91	>12.7		Mylar discolored yellowed
	0.45	22.5%	131.0%	-85.6%	>14.91	>12.65	flash	
	0.44	22.0%	131.0%		>14.91	>12.72		
NO 410 D1	0.40	10.0%	17.0%		10.67	13.86		oil in nomex raised dielectric N/C appearance
	0.32	8.0%	17.0%	-40.2%	10.67	11.86	21.1%	
	0.50	12.5%	17.0%		10.67	13.06		
NO MI 418 E1	0.06	1.5%	4.0%		10.23	10.34		oil in insulation N/C appearance
	0.05	1.3%	4.0%	-66.7%	10.23	9.19	-3.9%	
	0.05	1.3%	4.0%		10.23	9.97		
MEL 228 F1	0.40	20.0%	160.0%		>14.22	>12.97		discolored yellowed
	0.40	20.0%	160.0%	-87.5%	>14.22	>12.43	flash	
	0.40	20.0%	160.0%		>14.22	>12.75		
500 HRS in HFC-152a/S retrieve Zerol-150 @ 260 F -> 24 HRS @ 302°F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A2	0.12	3.0%	20.0%		>18.97	>15.96		slightly darkened delamination
	0.12	3.0%	20.0%	-85.4%	>18.97	>16.07	flash	
	0.11	2.8%	20.0%		>18.97	>15.68		
DA/MY/DA B2	0.03	1.5%	46.0%		>15.27	>13.8		darkened slightly warped
	0.04	2.0%	46.0%	-96.0%	>15.27	>14.43	flash	
	0.04	2.0%	46.0%		>15.27	>14.36		
MYLAR MO C2	0.13	6.5%	131.0%		>14.91	>12.98		slightly darkened yellowed
	0.08	4.0%	131.0%	-95.7%	>14.91	>12.84	flash	
	0.13	6.5%	131.0%		>14.91	>11.88		
NOMEX 410 D2	0.34	8.5%	17.0%		10.67	9.55		N/C
	0.38	9.5%	17.0%	-44.1%	10.67	10.71	-8.8%	
	0.42	10.5%	17.0%		10.67	8.94		
NO/MI 418 E2	0.05	1.3%	4.0%		10.23	9.89		N/C
	0.06	1.5%	4.0%	-62.5%	10.23	9.72	-3.9%	
	0.07	1.8%	4.0%		10.23	9.89		
MEL 228 F2	0.12	6.0%	160.0%		>14.22	>12.92		slightly darkened yellowed
	0.13	6.5%	160.0%	-96.0%	>14.22	>13.26	flash	
	0.13	6.5%	160.0%		>14.22	>12.81		

SLEEVING--HFC-152a/Shrieve Zerol-150 oil @ 260°F(127°C) !

500 HRS in HFC-152a/S hrieve Zerol-150 oil @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5561	0.6178	11.10%	Darkened, Nomex discolored
				black
				see photo
B1 MYLAR	0.5093	0.5219	2.47%	
				N/C
C1 NO/MY	0.3910	0.4188	7.11%	Black discoloration of the
				nomex inside
				see photo
HFC-152a/Shrieve Zerol-150 oil @ 260°F plus 24 hrs @ 302°F				
A2 NOMEX	0.5445	0.5659	3.93%	N/C
				same condition as above
B2 MYLAR	0.4778	0.4767	-0.23%	darkened
				some pockets in
				mylar, pulled away
C2 NO/MY	0.3999	0.4017	0.45%	N/C
				same condition as above
				see photo

500 HRS in HFC-152a/Shrieve Zerol-150 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.4382	1.4466	0.58%	39.02	55.60		0.05	2.50%	N/C
				39.02	62.25	53.30%	0.06	3.00%	
				39.02	61.60		0.06	3.00%	
B1 Polyester	0.6805	0.6918	1.66%	56.12	53.55		0.49	24.50%	N/C
				56.12	55.35	-4.73%	0.53	26.50%	
				56.12	51.50		0.44	22.00%	
C1 Permacel	1.6600	1.7749	6.92%	88.50	82.70		0.15	7.50%	
				88.50	101.00	4.12%	0.14	7.00%	darkened
				88.50	92.75		0.14	7.00%	
500 HRS in HFC-152a/Shrieve Zerol-150 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.3848	1.3857	0.06%	39.02	48.25		0.06	3.00%	N/C
				39.02	69.65	43.94%	0.08	4.00%	
				39.02	50.60		0.07	3.50%	
B2 Polyester	0.6400	0.6351	-0.77%	56.12	41.00		0.33	16.50%	discolored
				56.12	42.80	-22.40%	0.39	19.50%	
				56.12	46.85		0.47	23.50%	
C2 Permacel	1.4577	1.3456	-7.69%	88.50	96.75		0.16	8.00%	
				88.50	43.75	-15.31%	0.09	4.50%	Darkened
				88.50	84.35		0.13	6.50%	

TIE CORD--HFC-152a/S hrieve Zerol-150 oil @ 260°F(127°C) !

500 HRS IN R-152a/Shrieve Zerol-150 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2625	0.2663	1.45%	N/C	28.36	34.75		0.45	22.5%
					28.36	37.45	29.82%	0.48	24.0%
					28.36	38.25		0.48	24.0%
500 HRS IN R-152a/S hrieve Zerol-150 -> 24 HRS @ 302°F									
A2	0.2620	0.2612	-0.305%	N/C	28.36	24.45		0.41	20.5%
					28.36	28.25	1.49%	0.47	23.5%
					28.36	33.65		0.51	25.5%

LEAD WIRE INSULATION-HFC-152a/S hrieve Zerol-150 @ 260°F(127°C)

500 HRS IN HFC-152a/S hrieve Zerol-150 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.3315	4.4631	3.04%	N/C	9.61	13.17	
A1					9.61	13.34	35.31%
					9.61	12.50	
DTMD	4.0187	4.1600	3.52%	N/C	9.95	8.73	
B1					9.95	9.19	-18.49%
					9.95	6.41	
HFC-152a/S hrieve Zerol-150 @ 260°F -> 24 HRS @ 302°F							
DMD	4.3686	4.3973	0.66%	N/C	9.61	13.33	
A2					9.61	13.02	31.36%
					9.61	11.52	
DTMD	4.1010	4.1448	1.07%	N/C	9.95	9.66	
B2					9.95	10.12	0.57%
					9.95	10.24	

Appendix F

**Experimental Data for HFC-134a/ICI
Emkarate RL244 Exposure at 126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-134a/ICI Emkarate RL244 oil @260°F(127°C)

500 hours in HFC-134a/Emkarate RL244 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	25.6686	25.6817	0.051%	N/C	576	522		15.80	14.23	
					576	517	-9.9%	15.80	12.17	-16.6%
					576	518		15.80	13.13	
B1	25.3778	25.4405	0.247%	N/C	736	735		11.62	14.00	
					736	731	-0.2%	11.62	16.61	28.0%
					736	738		11.62	14.01	
C1	22.2264	22.2379	0.052%	N/C	579	446		16.58	17.73	
					579	464	-14.6%	16.58	16.57	-0.6%
					579	573		16.58	15.13	
500 hours in HFC-134a/Emkarate RL244 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	25.8451	25.8650	0.077%	N/C	576	558		15.80	15.12	
					576	511	-7.6%	15.80	15.29	-11.0%
					576	527		15.80	11.76	
B2	25.0496	25.0888	0.156%	N/C	736	731		11.62	13.10	
					736	731	-0.7%	11.62	11.76	13.4%
					736	731		11.62	14.67	
C2	22.6674	22.6874	0.088%	N/C	579	568		16.58	14.86	
					579	561	-3.9%	16.58	17.06	-3.6%
					579	541		16.58	16.03	

TWISTED PAIRS/WIRE A/WITH VARNISH-HFC-134a/ICI Emkarate RL244 oil @260°F(127°C)

500 hours in HFC-134/Emkarate RL244 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE	U-475 A1	22.8106	22.8406	0.132%	N/C	16.24	18.85		430	378	
						16.24	17.70	16.05%	430	377	2.87%
						16.24	19.99		430	572	
	Y-390 B1	25.2574	25.1887	-0.272%	N/C	18.77	14.07		510	332	
						18.77	16.45	-21.81%	510	391	-30.26%
						18.77	13.51		510	344	
	ER-610 C1	25.9696	26.0118	0.162%	N/C	15.57	13.34		442	362	
						15.57	13.95	-13.40%	442	328	-19.08%
						15.57	13.16		442	383	
	Y-833 D1	21.4774	21.4996	0.103%	N/C	12.04	12.89		578	566	
						12.04	16.30	17.66%	578	469	-7.96%
						12.04	13.31		578	561	
MID E	923 E1	22.9761	23.0134	0.162%	N/C	16.76	19.99		606	470	
						16.76	17.81	12.71%	606	558	-13.26%
						16.76	18.87		606	549	
	ISO-800 F1	27.1394	27.2858	0.539%	N/C	19.08	16.23		580	593	
						19.08	18.70	-4.21%	580	577	-0.40%
						19.08	19.90		580	577	
	500 hours in HFC-134a/Emkarate RL244 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)										
	U-475 A2	22.4812	22.5356	0.242%	N/C	16.24	16.78		430	333	
						16.24	14.58	3.86%	430	372	-16.28%
						16.24	19.24		430	375	
	Y-390 B2	25.0748	25.0991	0.097%	N/C	18.77	12.99		510	372	
						18.77	14.63	-23.76%	510	385	-24.90%
						18.77	15.31		510	392	
	ER-610 C2	25.8473	25.8745	0.105%	N/C	15.57	15.20		442	323	
						15.57	11.67	-8.29%	442	341	-24.06%
						15.57	15.97		442	343	
	Y-833 D2	21.3866	21.4539	0.315%	N/C	12.04	14.66		578	477	
						12.04	14.11	14.62%	578	544	-11.59%
						12.04	12.63		578	512	
	923 E2	22.6679	22.7056	0.166%	N/C	16.76	18.15		606	557	
						16.76	17.97	10.36%	606	572	-9.30%
						16.76	19.37		606	520	
	ISO-800 F2	26.7568	26.8549	0.367%	N/C	19.08	18.42		580	585	
						19.08	17.53	-6.13%	580	459	-6.09%
						19.08	17.78		580	590	

TWISTED PAIRS/WIRE B/WITH VARNISH -HFC-134a/ICI Emkarate RL244 oil @260°F(127°C)

500 HOURS in HFC-134a/Emkarate RL244 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	25.8599	25.9111	0.20%	N/C	13.32	13.54		746	728	
						13.32	14.39	6.51%	746	727	-2.37%
						13.32	14.63		746	730	
	Y-390 B1	28.1099	28.1484	0.14%	N/C	12.28	13.22		755	740	
						12.28	14.08	5.54%	755	737	-2.47%
						12.28	11.58		755	732	
	ER-610 C1	27.4367	27.4911	0.20%	N/C	12.73	13.72		734	730	
						12.73	14.84	10.37%	734	731	-0.41%
						12.73	13.59		734	732	
	Y-833 D1	22.2186	22.2446	0.12%	N/C	12.49	13.50		734	714	
						12.49	13.66	6.41%	734	727	-1.50%
						12.49	12.71		734	728	
	923 E1	30.5710	30.6153	0.14%	N/C	14.38	15.63		742	736	
						14.38	12.55	2.46%	742	743	-0.09%
						14.38	16.02		742	745	
	ISO-800 F1	28.2543	28.3432	0.31%	N/C	12.29	13.65		747	740	
						12.29	14.04	11.50%	747	743	-0.94%
						12.29	13.42		747	737	
HFC-134a/Emkarate RL244 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
U-475 A2	25.8766	25.9342	0.22%	N/C	13.32	12.57		746	728		
					13.32	12.93	1.23%	746	728	-2.37%	
					13.32	14.95		746	729		
Y-390 B2	30.1085	30.2076	0.33%	N/C	12.28	13.20		755	736		
					12.28	13.85	8.60%	755	748	-1.72%	
					12.28	12.96		755	744		
ER-610 C2	27.2600	27.3212	0.22%	N/C	12.73	13.36		734	733		
					12.73	13.65	7.41%	734	729	-0.41%	
					12.73	14.01		734	731		
Y-833 D2	22.1215	22.1497	0.13%	N/C	12.49	12.37		734	730		
					12.49	11.87	-0.43%	734	728	-0.54%	
					12.49	13.07		734	732		
923 E2	31.0640	31.0893	0.08%	N/C	14.38	10.30		742	754		
					14.38	15.25	-4.01%	742	755	1.62%	
					14.38	15.86		742	755		
ISO-800 F2	28.8235	28.9812	0.55%		12.29	12.44		747	743		
				N/C	12.29	12.83	5.80%	747	742	-0.60%	
					12.29	13.74		747	742		

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-134a/ICI Emkarate RL244 @ 260°F(127°C)

500 Hours in HFC-134a/Emkarate RL244 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE	U-475 A1	26.2922	26.3264	0.130%	N/C	15.10	16.28		469	267	
						15.10	13.99	8.79%	469	321	-35.32%
						15.10	19.01		469	322	
	Y-390 B1	27.0214	27.0640	0.158%	N/C	18.24	12.84		473	441	
						18.24	19.99	-10.54%	473	386	-10.57%
						18.24	16.12		473	442	
	ER-610 C1	22.9872	23.0812	0.409%	N/C	14.53	15.11		494	421	
						14.53	6.96	-13.01%	494	402	-16.53%
						14.53	15.85		494	414	
	Y-833 D1	25.7669	25.7842	0.067%	N/C	11.38	19.99		557	390	
						11.38	15.61	62.83%	557	681	-12.57%
						11.38	19.99		557	390	
	923 E1	25.4722	25.4827	0.041%	N/C	15.85	11.87		503	555	
						15.85	11.79	-24.03%	503	434	3.71%
						15.85	12.46		503	576	
	ISO-800 F1	25.4310	25.4863	0.217%	N/C	14.75	17.05		632	575	
						14.75	16.13	15.86%	632	632	-5.85%
						14.75	18.09		632	578	
	HFC-134/Emkarate RL244 @ 260°F plus 24 hours @ 302°F(150°C)										
	U-475 A2	26.6999	26.7340	0.128%	N/C	15.10	18.61		469	290	
						15.10	17.91	24.46%	469	346	-33.40%
						15.10	19.86		469	301	
	Y-390 B2	26.4269	26.5024	0.286%	N/C	18.24	18.45		473	552	
						18.24	19.48	-0.99%	473	527	9.16%
						18.24	16.64		473	470	
	ER-610 C2	24.9227	24.9433	0.083%	N/C	14.53	4.27		494	367	
						14.53	12.07	-23.40%	494	435	-21.66%
						14.53	17.05		494	359	
	Y-833 D2	25.5671	25.5830	0.062%	N/C	11.38	19.75		557	548	
						11.38	16.16	36.09%	557	563	-8.62%
						11.38	10.55		557	416	
	923 E2	25.4331	25.4346	0.006%	N/C	15.85	13.76		503	543	
						15.85	16.31	-4.94%	503	503	7.55%
						15.85	15.13		503	577	
	ISO-800 F2	25.2502	25.2838	0.133%	N/C	14.75	19.22		632	557	
						14.75	19.74	32.43%	632	591	-8.54%
						14.75	19.64		632	586	

HELICAL COILS/WIRE A---HFC-134a/ICI Emkarate RL244 oil @260°F(127°C)

	500 HRS in HFC-134a/Emkarate RL244 @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE	U-475 A1	40.7242	40.8076	0.205%	N/C	73.73	60.40	-19.39%
						73.73	59.10	
						73.73	58.80	
	Y-390 B1	39.3406	39.4533	0.286%	N/C	43.78	32.00	-27.63%
						43.78	28.90	
						43.78	34.15	
	ER-610 C1	41.1489	41.2295	0.196%	N/C	51.81	66.20	12.75%
						51.81	54.40	
						51.81	54.65	
	Y-833 D1	38.8811	38.8908	0.025%	N/C	9.85	9.00	102.17%
						9.85	23.62	
						9.85	27.12	
	923 E1	40.2807	40.3373	0.141%	N/C	41.28	34.20	-18.90%
						41.28	34.42	
						41.28	31.82	
	ISO-800 F1	38.3452	38.4086	0.165%	N/C	45.01	39.07	-14.72%
						45.01	37.70	
						45.01	45.40	
	500 HRS in HFC-134a/Emkarate RL244 @ 260 F -> 24 HRS 302°F							
IMIDE	U-475 A2	39.3940	39.4521	0.147%	N/C	73.73	61.75	-24.44%
						73.73	49.82	
						73.73	61.60	
	Y-390 B2	39.3878	39.4660	0.199%	N/C	43.78	43.70	-9.04%
						43.78	38.05	
						43.78	37.72	
	ER-610 C2	40.1287	40.1639	0.088%	N/C	51.81	60.60	-5.11%
						51.81	48.82	
						51.81	38.07	
	Y-833 D2	38.5234	38.4999	-0.061%	N/C	9.85	22.75	125.69%
						9.85	31.47	
						9.85	12.47	
	923 E2	39.8648	39.9203	0.139%	N/C	41.28	42.72	-4.67%
						41.28	37.07	
						41.28	38.27	
	ISO-800 F2	38.5946	38.6362	0.108%	N/C	45.01	40.42	-1.56%
						45.01	50.05	
						45.01	42.45	

HELICAL COILS/WIRE B-HFC-134a/ICI Emkarate RL244 Oil

500 HRS in HFC-134a/Emkarate RL244 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE EPIPOXY GLASS	U-475 A1	35.4370	35.5317	0.267%	N/C	40.14	36.97	-22.55%
						40.14	23.57	
						40.14	32.72	
	Y-390 B1	38.7910	38.9687	0.458%	N/C	36.12	37.57	5.24%
						36.12	37.90	
						36.12	38.57	
	ER-610 C1	37.9461	38.0434	0.256%	N/C	35.96	27.47	-19.29%
						35.96	29.85	
						35.96	29.75	
	Y-833 D1	36.4753	36.5744	0.272%	N/C	33.14	21.90	-26.00%
						33.14	23.65	
						33.14	28.02	
	923 E1	36.4211	36.5224	0.278%	N/C	40.52	41.07	2.41%
						40.52	43.80	
						40.52	39.62	
	ISO-800 F1	36.9710	37.0801	0.295%	N/C	20.20	25.67	27.13%
						20.20	24.12	
						20.20	27.25	
500 HRS in HFC-134a/Emkarate RL244 @ 260 F -> 24 HRS 302°F								
U-475 A2	38.0230	38.0785	0.146%	N/C	40.14	31.95	-14.37%	
					40.14	31.60		
					40.14	39.57		
Y-390 B2	38.3780	38.4749	0.252%	N/C	36.12	41.20	6.67%	
					36.12	39.37		
					36.12	35.02		
ER-610 C2	38.3120	38.3629	0.133%	N/C	35.96	31.47	-13.06%	
					35.96	32.35		
					35.96	29.97		
Y-833 D2	37.2125	37.2625	0.134%	N/C	33.14	25.37	-24.77%	
					33.14	24.57		
					33.14	24.85		
923 E2	36.7624	36.8179	0.151%	N/C	40.52	38.75	-4.48%	
					40.52	40.57		
					40.52	36.80		
ISO-800 F2	37.9820	38.0632	0.214%	N/C	20.20	20.80	5.36%	
					20.20	20.00		
					20.20	23.05		

HELICAL COILS/WIRE C-HFC-134a/ICI Emkarate RL244 @ 260°F(127°C)

500 HRS in HFC-134a/Emkarate RL244 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER IMIDE POLYAMIDE	U-475 A1	37.1319	37.2192	0.235%	N/C	51.21	40.92	8.68%
						51.21	65.02	
						51.21	61.02	
	Y-390 B1	40.5363	40.6354	0.244%	N/C	50.72	29.47	-46.58%
						50.72	24.22	
						50.72	27.60	
	ER-610 C1	37.2706	37.3421	0.192%	N/C	58.33	31.42	-28.76%
						58.33	45.30	
						58.33	47.95	
	Y-833 D1	38.1240	38.0236	-0.263%	N/C	5.84	11.35	56.68%
						5.84	12.30	
						5.84	3.80	
	923 E1	40.0783	40.1466	0.170%	N/C	49.26	22.30	-55.20%
						49.26	20.65	
						49.26	23.25	
	ISO-800 F1	39.6093	39.7923	0.462%	N/C	36.08	19.67	-51.83%
						36.08	20.52	
						36.08	11.95	
500 HRS in HFC-134a/Emkarate RL244 @ 260 F-> 24 HRS 302°F								
POLYAMIDE IMIDE	U-475 A2	37.9560	37.9958	0.105%	N/C	51.21	71.10	4.67%
						51.21	70.80	
						51.21	18.90	
	Y-390 B2	39.5953	39.5986	0.008%	N/C	50.72	26.40	-39.43%
						50.72	36.47	
						50.72	29.30	
	ER-610 C2	37.2301	37.3135	0.224%	N/C	58.33	56.45	-4.05%
						58.33	56.10	
						58.33	55.35	
	Y-833 D2	38.0782	37.9552	-0.323%	N/C	5.84	4.48	35.93%
						5.84	11.32	
						5.84	8.02	
	923 E2	40.3194	40.3559	0.091%	N/C	49.26	34.70	-34.21%
						49.26	30.10	
						49.26	32.42	
	ISO-800 F2	39.8403	39.8882	0.120%	N/C	36.08	21.25	-34.20%
						36.08	28.35	
						36.08	21.62	

SINGLE MAG WIRE WITHOUT VARNISH-HFC-134a/ICI Emkarate RL244 @ 260°F(127°C))

500 HRS in HFC-134a/Emkarate RL244 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.939	3.9492	0.259%	N/C	
					YES
B1	4.4094	4.4273	0.406%	N/C	
					YES
C1	3.9177	3.9253	0.194%	N/C	
					YES
500 HRS in HFC-134a/Emkarate RL244-> 302°F for 24 HRS					
A2	3.9319	3.9458	0.354%	N/C	
					YES
B2	4.3524	4.3735	0.485%	N/C	
					YES
C2	3.9302	3.9426	0.316%	N/C	
					YES

500 HRS in HFC-134a/RL244 @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
P O L Y E S T E R I M I D E P O L Y A M I D E I M I D E	U-475 A1	3.9207	3.9522	0.803%	N/C	
						YES
	Y-390 B1	3.7968	3.8915	2.494%	N/C	
						NO
	ER-610 C1	3.7952	3.8308	0.938%	N/C	
						YES
	Y-833 D1	4.3421	4.3626	0.472%	N/C	
						YES
	923 E1	4.0708	4.1078	0.909%	N/C	
						NO
	ISO-800 F1	4.0980	4.1776	1.942%	N/C	
						NO
	HFC-134a/RL244 @ 260°F -> 24 HRS @ 302F					
	U-475 A2	3.9190	3.9476	0.730%	N/C	
						YES
	Y-390 B2	3.8539	3.8824	0.740%	N/C	
						NO
	ER-610 C2	3.9579	4.0094	1.301%	N/C	
						Yes
	Y-833 D2	4.2807	4.3020	0.498%	N/C	
						YES
	923 E2	3.7995	3.8207	0.558%	N/C	
						NO
	ISO-800 F2	4.2088	4.2457	0.877%	N/C	
						NO

SINGLE/WIRE B/WITH VARNISH--HFC-134a/ICI Emkarate RL244 oil @ 260°F(127°C)

		500 HRS in HFC-134a/Emkarate RL244 @ 260°F					
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX	
P O L Y E S T E R P O L Y A M I D E I M I D E E P O X Y G L A S S	U-475 A1	4.3621	4.4156	1.226%	N/C		
						NO	
	Y-390 B1	4.6095	4.6538	0.961%	N/C		
						NO	
	ER-610 C1	3.8093	3.8671	1.517%	N/C		
						YES	
	Y-833 D1	4.3019	4.3521	1.167%	N/C		
						YES	
	923 E1	4.0331	4.0775	1.101%	N/C		
						NO	
	ISO-800 F1	3.7104	3.7738	1.709%	N/C		
						NO	
	HFC-134a/Emkarate RL244 @ 260°F(127°C)						
	U-475 A2	4.4611	4.4911	0.672%	N/C		
						NO	
	Y-390 B2	4.1843	4.2230	0.925%	N/C		
						NO	
	ER-610 C2	3.9850	4.0357	1.272%	N/C		
						YES	
	Y-833 D2	4.2665	4.2842	0.415%	N/C		
						YES	
	923 E2	4.1721	4.1972	0.602%	N/C		
						NO	
	ISO-800 F2	3.5970	3.6240	0.751%	N/C		
						NO	

500 HRS in HFC-134a/Emkarate RL244 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIMIDE	U-475 A1	4.3740	4.3936	0.448%	N/C	YES
	Y-390 B1	4.4861	4.5065	0.455%	N/C	NO
	ER-610 C1	4.2346	4.2977	1.490%	N/C	YES
	Y-833 D1	4.2363	4.2640	0.654%	N/C	YES
	923 E1	4.3909	4.4403	1.125%	N/C	NO
	ISO-800 F1	4.2245	4.2466	0.523%	N/C	NO
	HFC-134a/Emkarate RL244 -> 24 HRS @ 302°F					
	U-475 A2	4.4653	4.4940	0.643%	N/C	YES
	Y-390 B2	4.0670	4.0873	0.499%	N/C	NO
	ER-610 C2	4.1629	4.1864	0.565%	N/C	YES
	Y-833 D2	3.9180	3.9452	0.694%	N/C	YES
	923 E2	4.3009	4.3238	0.532%	N/C	NO
	ISO-800 F2	4.1900	4.2153	0.604%	N/C	NO

Varnish Disks----HFC-134a/ICI Emkarate RL244 Oil

500 HRS IN R-134a/Emkarate RL244 @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.5096	2.5506	1.63%	Orange in	N/C
				Color	green
				Changed	overnight
Y-390 B1	2.0713	2.0582	0.63%	N/C	N/C
ER-610 C1	2.5162	2.5943	3.10%	N/C	N/C
Y-833 D1	2.3727	2.4039	1.31%	Orange in	N/C
				color	to green
				changed	overnight
923 E1	1.6179	1.6148	-0.19%	N/C	N/C
ISO-800 F1	1.3227	1.2789	-3.31%	N/C	N/C
R-134a/Emkarate RL244 at --->24 hour at 302°F.					
U-475 A2	2.3800	2.3609	-0.80%	darkened	N/C
				no color	
				change	
Y-390 B2	2.3041	2.2520	-2.26%	N/C	N/C
ER-610 C2	2.3006	2.3120	0.50%	darkened	N/C
Y-833 D2	2.4995	2.5343	1.39%	no	N/C
				color	
				change	
923 E2	1.8186	1.8010	-0.97%	N/C	
					N/C
ISO-800 F2	1.5212	1.4600	-4.02%	darkened	
					N/C

SHEET INSULATION-HFC-134a/Emkarate RL244 oil @ 260°F(127°C)

500 HRS in HFC-134a/Emkarate RL244 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	%CHANGE TENSILE
NO/MY/NO A1	7.3752	7.8988	7.10%	0.433	152.80	21	17.4	16.80	
				0.445	155.80	21	17.4	16.67	-7.31%
				0.413	129.30	21	17.4	14.91	
DA/MY/DA B1	7.5121	7.7963	3.78%	0.368	88.80	21	13.7	11.49	
				0.401	105.40	21	13.7	12.52	-10.34%
				0.386	104.10	21	13.7	12.84	
MYLAR MO C1	3.9836	4.0443	1.52%	0.449	76.60	10	21.7	17.06	
				0.423	71.90	10	21.7	17.00	-20.66%
				0.498	87.60	10	21.7	17.59	
NO 410 D1	3.7038	4.1585	12.28%	0.446	81.45	10	18.7	18.26	
				0.468	80.85	10	18.7	17.28	-4.59%
				0.484	87.05	10	18.7	17.99	
NO MI 418 E1	3.6529	4.4321	21.33%	0.503	28.10	10	7.5	5.59	
				0.507	29.80	10	7.5	5.88	-23.76%
				0.500	28.45	10	7.5	5.69	
MEL 228 F1	4.2275	4.3047	1.83%	0.458	73.50	10	21.7	16.05	
				0.446	72.15	10	21.7	16.18	-26.15%
				0.528	83.70	10	21.7	15.85	
500 HRS in HFC-134a/Emkarate RL2 141.90									
NO/MY/NO A2	7.2072	7.5181	4.31%	0.418	141.90	21	17.4	16.17	
				0.420	146.40	21	17.4	16.60	-5.55%
				0.397	137.90	21	17.4	16.54	
DA/MY/DA B2	7.3811	7.7396	4.86%	0.417	116.90	21	13.7	13.35	
				0.394	108.50	21	13.7	13.11	-4.84%
				0.375	99.60	21	13.7	12.65	
MYLAR MO C2	3.9312	3.9587	0.70%	0.446	69.40	10	21.7	15.56	
				0.436	74.45	10	21.7	17.08	-23.36%
				0.439	75.75	10	21.7	17.26	
NOMEX 410 D2	3.6226	3.9332	8.57%	0.488	93.15	10	18.7	19.09	
				0.437	86.86	10	18.7	19.88	3.83%
				0.511	98.55	10	18.7	19.29	
NO/MI 418 E2	3.8304	4.7518	24.05%	0.480	27.30	10	7.5	5.69	
				0.510	31.51	10	7.5	6.18	-20.69%
				0.495	29.60	10	7.5	5.98	
MEL 228 F2	4.1219	4.1445	0.55%	0.455	76.20	10	21.7	16.75	
				0.482	79.50	10	21.7	16.49	-23.77%
				0.382	62.60	10	21.7	16.39	

SHEET INSULATION-HFC-134a/Emkarate RL244 oil @ 260°F(127°C)

500 HRS in HFC-134a/Emkarate RL244 @ 260 F								
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	VISUAL EXP
NO/MY/NO A1	0.71	17.8%	20.0%		>18.97	flash		N/C
	0.67	13.8%	20.0%	-13.8%	>18.97	flash	FLASH	
	0.71	17.8%	20.0%		>18.97	flash		
DA/MY/DA B1	0.42	21.0%	46.0%		>15.27	flash		Yellowed slightly warped
	0.70	35.0%	46.0%	-34.4%	>15.27	flash	FLASH	
	0.69	34.5%	46.0%		>15.27	flash		
MYLAR MO C1	2.60	130.0%	131.0%		>14.91	flash		N/C
	1.70	85.0%	131.0%	-10.7%	>14.91	flash	FLASH	
	2.72	136.0%	131.0%		>14.91	flash		
NO 410 D1	0.41	10.3%	17.0%		10.67	flash		N/C
	0.32	8.0%	17.0%	-48.0%	10.67	12.06	13.0%	
	0.33	8.3%	17.0%		10.67	flash		
NO MI 418 E1	0.05	1.3%	4.0%		10.23	11.60		N/C
	0.06	1.5%	4.0%	-64.6%	10.23	12.12	15.1%	
	0.06	1.5%	4.0%		10.23	11.60		
MEL 228 F1	2.72	136.0%	160.0%		>14.22	flash		N/C
	2.83	141.5%	160.0%	-9.1%	>14.22	flash	FLASH	
	3.18	159.0%	160.0%		>14.22	flash		
500 HRS in HFC-134a/Emkarate RL244 @ 260 F ->24 HRS @ 302°F								
NO/MY/NO A2	0.51	12.8%	20.0%		>18.97	flash		Delamination big pockets
	0.53	13.3%	20.0%	-34.2%	>18.97	flash	FLASH	
	0.54	13.5%	20.0%		>18.97	flash		
DA/MY/DA B2	0.50	25.0%	46.0%		>15.27	flash		Yellowed slightly warped
	0.49	24.5%	46.0%	-47.8%	>15.27	flash	FLASH	
	0.45	22.5%	46.0%		>15.27	flash		
MYLAR MO C2	1.45	72.5%	131.0%		>14.91	flash		N/C
	2.65	132.5%	131.0%	-19.3%	>14.91	flash	FLASH	
	2.24	112.0%	131.0%		>14.91	flash		
NOMEX 410 D2	0.42	10.5%	17.0%		10.67	11.74		N/C
	0.46	11.5%	17.0%	-36.3%	10.67	11.46	6.3%	
	0.42	10.5%	17.0%		10.67	10.83		
NO/MI 418 E2	0.05	1.3%	4.0%		10.23	11.00		N/C
	0.05	1.3%	4.0%	-68.8%	10.23	12.58	14.7%	
	0.05	1.3%	4.0%		10.23	11.61		
MEL 228 F2	2.05	102.5%	160.0%		>14.22	flash		N/C
	3.12	156.0%	160.0%	-22.3%	>14.22	flash	FLASH	
	2.29	114.5%	160.0%		>14.22	flash		

SLEEVING--HFC-134a/ICI Emkarate RL244 @ 260°F(127°C)

500 HRS in HFC-134a/Emkarate RL244 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5470	0.6347	16.03%	N/C
B1 MYLAR	0.4930	0.5149	4.44%	N/C
C1 NO/MY	0.3887	0.4132	6.30%	N/C
HFC-134a/Emkarate RL244 oil @ 260°F plus 24 hrs @ 302°F				
A2 NOMEX	0.5170	0.5778	11.76%	N/C
B2 MYLAR	0.3720	0.3819	2.66%	N/C
C2 NO/MY	0.3615	0.3728	3.13%	N/C some pockets where mylar pulled away.

500 HRS in HFC-134a/Emkarate RL244 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.5629	1.7077	9.26%	39.02	51.90		0.06	3.00%	N/C
				39.02	38.55	23.95%	0.05	2.50%	
				39.02	54.65		0.06	3.00%	
B1 Polyester	0.6947	0.8070	16.17%	56.12	58.70		0.76	38.00%	N/C
				56.12	63.30	5.55%	0.90	45.00%	
				56.12	55.70		0.57	28.50%	
C1 Permacel	1.6194	1.7800	9.92%	88.50	56.10		0.11	5.50%	
				88.50	87.75	-13.97%	0.19	9.50%	darkened
				88.50	84.55		0.18	9.00%	
500 HRS in HFC-134a/Emkarate HL244 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.4980	1.6693	11.44%	39.02	55.10		0.06	3.00%	N/C
				39.02	47.57	28.97%	0.05	2.50%	
				39.02	48.30		0.05	2.50%	
B2 Polyester	0.6509	0.7042	8.19%	56.12	58.45		0.75	37.50%	N/C
				56.12	54.52	1.43%	0.56	28.00%	
				56.12	57.80		0.69	34.50%	
C2 Permacel	1.4614	1.4676	0.42%	88.50	64.70		0.12	6.00%	
				88.50	73.85	-21.93%	0.14	7.00%	Darkened
				88.50	68.72		0.12	6.00%	

TIE CORD--HFC-134a/Emkarate RL244 oil @ 260°F(127°C)

500 HRS IN R-134a/Emkarate RL244 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2803	0.3297	17.62%	N/C	28.36	36.25		0.47	23.5%
					28.36	32.25	20.12%	0.42	21.0%
					28.36	33.70		0.44	22.0%
500 HRS IN R-134a/Emkarate RL244 -> 24 HRS @ 302°F									
A2	0.2708	0.2927	8.087%	N/C	28.36	31.07		0.40	20.0%
					28.36	32.95	17.35%	0.42	21.0%
					28.36	35.82		0.44	22.0%

LEAD WIRE INSULATION-HFC-134a/ICI Emkarate RL244 @ 260°F(127°C)

500 HRS IN HFC-134a/Emkarate RL244 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.0316	4.2258	4.82%	N/C	9.61	9.50	
A1					9.61	7.16	-9.61%
					9.61	9.40	
DTMD	4.3094	4.4829	4.03%	N/C	9.95	13.06	
B1					9.95	14.41	43.95%
					9.95	15.50	
HFC-134a/Emkarate RL244 @ 260°F -> 24 HRS @ 302°F							
DMD	4.0456	4.2190	4.29%	N/C	9.61	9.35	
A2					9.61	9.16	-2.81%
					9.61	9.51	
DTMD	4.3560	4.5139	3.62%	N/C	9.95	14.85	
B2					9.95	14.42	39.56%
					9.95	12.39	

Appendix G

**Experimental Data for HFC-134a/Henkel-
Emery 2927 ISO-32 Exposure at
126°C(260°F)**

500 hours in HFC-134a/2927 Iso-32 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	25.5908	25.6092	0.072%	N/C	576	426		15.80	15.09	
					576	466	-16.7%	15.80	17.59	3.0%
					576	547		15.80	16.16	
B1	29.3638	29.3872	0.080%	N/C	736	731		11.62	12.98	
					736	729	-6.8%	11.62	13.36	12.1%
					736	597		11.62	12.73	
C1	27.5387	27.5492	0.038%	N/C	579	413		16.58	16.90	
					579	531	-22.9%	16.58	12.67	-11.2%
					579	395		16.58	14.59	
500 hours in HFC-134a/Emkarate RL244 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	25.3742	25.3711	-0.012%	N/C	576	517		15.80	13.64	
					576	499	-11.9%	15.80	15.89	-6.9%
					576	506		15.80	14.60	
B2	29.0361	29.0392	0.011%	N/C	736	735		11.62	11.16	
					736	731	-0.5%	11.62	11.42	-1.1%
					736	732		11.62	11.90	
C2	27.2952	27.2889	-0.023%	N/C	579	441		16.58	13.04	
					579	453	-16.5%	16.58	17.04	-4.5%
					579	557		16.58	17.41	

		500 hours in HFC-134/Emery 2927 Iso-32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR-WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE		
POLYESTER POLYAMIDE MID E I M I D E	U-475 A1	22.7747	22.8062	0.138%	N/C	16.24	15.50		430	529			
						16.24	12.52	-29.56%	430	492	8.91%		
						16.24	6.30		430	384			
	Y-390 B1	23.5661	23.6164	0.213%	N/C	18.77	19.79		510	526			
						18.77	cracked	1.92%	510	567	4.77%		
						18.77	18.47		510	510			
	ER-610 C1	23.5019	23.5256	0.101%	N/C	15.57	15.75		442	391			
						15.57	11.61	-11.69%	442	389	-8.30%		
						15.57	13.89		442	436			
	Y-833 D1	23.9209	23.9165	-0.018%	N/C	12.04	15.27		578	472			
						12.04	14.10	21.51%	578	576	-9.34%		
						12.04	14.52		578	cracked			
	923 E1	22.6269	22.6753	0.214%	N/C	16.76	19.06		606	576			
						16.76	18.71	14.16%	606	583	-4.07%		
						16.76	19.63		606	585			
	ISO-800 F1	22.8593	22.8982	0.170%	N/C	19.08	17.95		580	529			
						19.08	19.19	-3.37%	580	410	-13.33%		
						19.08	18.17		580	569			
	500 hours in HFC-134a/Emery 2927 Iso-32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)												
U-475 A2	22.9302	22.9253	-0.021%	N/C	16.24	12.66		430	419				
					16.24	16.50	-12.87%	430	376	-4.81%			
					16.24	13.29		430	433				
Y-390 B2	23.3326	23.3564	0.102%	N/C	18.77	19.74		510	555				
					18.77	10.26	-18.58%	510	580	11.57%			
					18.77	15.85		510	572				
ER-610 C2	24.5069	24.5182	0.046%	N/C	15.57	14.14		442	274				
					15.57	12.81	-16.53%	442	314	-35.14%			
					15.57	12.04		442	272				
Y-833 D2	22.6270	22.5196	-0.475%	N/C	12.04	12.33		578	444				
					12.04	10.00	-3.68%	578	427	-25.55%			
					12.04	12.46		578	420				
923 E2	22.7473	22.7749	0.121%	N/C	16.76	13.08		606	419				
					16.76	13.30	-10.18%	606	584	-13.70%			
					16.76	18.75		606	566				
ISO-800 F2	24.7682	24.7877	0.079%	N/C	19.08	17.81		580	459				
					19.08	19.33	-8.51%	580	438	-14.02%			
					19.08	15.23		580	599				

500 HOURS in HFC-134a/2927 Iso-32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	EXP T PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MID E I M I D E E P O X Y G L A S S	U-475 A1	25.8955	25.9535	0.22%	N/C	13.32	15.70		746	732	
						13.32	14.86	8.26%	746	730	-2.10%
						13.32	12.70		746	729	
	Y-390 B1	25.8219	25.5332	-1.12%	N/C	12.28	11.79		755	743	
						12.28	14.48	5.35%	755	742	-2.16%
						12.28	12.54		755	731	
	ER-610 C1	24.4357	24.4197	-0.07%	N/C	12.73	14.04		734	735	
						12.73	13.81	1.07%	734	733	-0.18%
						12.73	10.75		734	730	
	Y-833 D1	21.7450	21.7649	0.09%	N/C	12.49	13.46		734	728	
						12.49	11.36	-3.95%	734	731	-5.31%
						12.49	11.17		734	626	
	923 E1	27.7914	27.8581	0.24%	N/C	14.38	13.54		742	750	
						14.38	14.75	8.25%	742	759	1.62%
						14.38	18.41		742	753	
	ISO-800 F1	25.4754	25.5471	0.28%	N/C	12.29	13.25		747	742	
						12.29	15.13	15.84%	747	735	-1.16%
						12.29	14.33		747	738	
HFC-134a/2927 Iso-32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
U-475 A2	24.9242	24.9331	0.04%	N/C	13.32	10.73		746	733		
					13.32	11.85	-11.86%	746	729	-2.14%	
					13.32	12.64		746	728		
Y-390 B2	26.2979	26.3327	0.13%	N/C	12.28	12.53		755	750		
					12.28	10.78	-2.36%	755	746	-0.93%	
					12.28	12.66		755	744		
ER-610 C2	25.1290	25.1418	0.05%	N/C	12.73	11.20		734	732		
					12.73	11.90	-9.27%	734	733	-0.18%	
					12.73	11.55		734	733		
Y-833 D2	22.1276	22.1260	-0.01%	N/C	12.49	11.84		734	727		
					12.49	11.68	-3.76%	734	731	-2.04%	
					12.49	12.54		734	699		
923 E2	28.6164	28.6407	0.08%	N/C	14.38	13.37		742	756		
					14.38	12.75	-8.23%	742	755	1.89%	
					14.38	13.47		742	757		
ISO-800 F2	26.6174	26.6545	0.14%		12.29	12.70		747	743		
				N/C	12.29	12.03	-1.57%	747	736	-1.00%	
					12.29	11.56		747	746		

500 Hours in HFC-134a/2927 Iso-32 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE	U-475 A1	23.2538	23.2768	0.099%	N/C	15.10	13.79		469	495	
						15.10	12.71	-2.94%	469	559	11.02%
						15.10	17.47		469	508	
	Y-390 B1	23.6194	23.6675	0.204%	N/C	18.24	19.99		473	569	
						18.24	17.40	0.90%	473	562	20.51%
						18.24	17.82		473	579	
	ER-610 C1	23.7108	23.7257	0.063%	N/C	14.53	13.70		494	597	
						14.53	14.39	3.51%	494	573	15.79%
						14.53	17.03		494	546	
	Y-833 D1	23.9792	23.9739	-0.022%	N/C	11.38	13.40		557	330	
						11.38	11.69	10.81%	557	407	-34.65%
						11.38	12.74		557	355	
	923 E1	27.3721	27.4224	0.184%	N/C	15.85	17.22		503	559	
						15.85	17.55	6.65%	503	703	22.80%
						15.85	15.94		503	591	
	ISO-800 F1	23.7131	23.7432	0.127%	N/C	14.75	15.97		632	579	
						14.75	14.73	11.64%	632	615	-8.28%
						14.75	18.70		632	545	
HFC-134/2927 Iso-32 @ 260°F plus 24 hours @ 302°F(150°C)											
POLYAMIDEIMIDE	U-475 A2	23.8085	23.8018	-0.028%	N/C	15.10	13.26		469	381	
						15.10	9.02	-21.37%	469	548	-7.82%
						15.10	13.34		469	368	
	Y-390 B2	24.8695	24.8920	0.090%	N/C	18.24	18.16		473	506	
						18.24	19.81	2.22%	473	514	9.16%
						18.24	17.48		473	529	
	ER-610 C2	22.7279	22.7307	0.012%	N/C	14.53	15.10		494	386	
						14.53	12.64	-4.29%	494	420	-19.50%
						14.53	13.98		494	387	
	Y-833 D2	22.7038	22.6883	-0.068%	N/C	11.38	10.67		557	524	
						11.38	9.85	-8.61%	557	591	-4.37%
						11.38	10.68		557	483	
	923 E2	23.4601	23.4748	0.063%	N/C	15.85	11.77		503	576	
						15.85	9.09	-29.70%	503	503	11.00%
						15.85	12.57		503	596	
	ISO-800 F2	23.7054	23.7178	0.052%	N/C	14.75	15.30		632	583	
						14.75	17.73	19.30%	632	575	-10.65%
						14.75	19.76		632	536	

HELICAL COILS/WIRE A---HFC-134a/Emery 2927 Iso-32 @260°F(127°C)

	500 HRS in HFC-134a/2927 Iso-32 @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER	U-475 A1	40.0955	40.1711	0.189%	N/C	73.73	56.20	-20.01%
						73.73	51.15	
						73.73	66.80	
	Y-390 B1	38.2069	38.3221	0.302%	N/C	43.78	33.30	-34.18%
						43.78	22.50	
						43.78	30.65	
	ER-610 C1	39.3824	39.4532	0.180%	N/C	51.81	55.20	11.05%
						51.81	63.35	
						51.81	54.05	
POLYAMIDE	Y-833 D1	37.1025	37.1095	0.019%	N/C	9.85	14.00	30.69%
						9.85	12.50	
						9.85	12.12	
	923 E1	40.2400	40.2981	0.144%	N/C	41.28	32.40	-19.56%
						41.28	33.85	
						41.28	33.37	
	ISO-800 F1	37.1134	37.1642	0.137%	N/C	45.01	27.50	-42.27%
						45.01	24.47	
						45.01	26.35	
	500 HRS in HFC-134a/2927 Iso-32 @ 260 F -> 24 HRS 302°F							
IMIDE	U-475 A2	39.5086	39.5387	0.076%	N/C	73.73	67.15	-26.16%
						73.73	52.07	
						73.73	56.82	
	Y-390 B2	39.0304	39.0729	0.109%	N/C	43.78	38.82	-15.30%
						43.78	39.52	
						43.78	32.90	
	ER-610 C2	38.1647	38.1874	0.059%	N/C	51.81	43.42	-10.00%
						51.81	57.00	
						51.81	39.47	
	Y-833 D2	37.8349	37.8058	-0.077%	N/C	9.85	14.20	177.50%
						9.85	50.65	
						9.85	17.15	
	923 E2	39.7964	39.8247	0.071%	N/C	41.28	36.27	-10.09%
						41.28	38.37	
						41.28	36.70	
	ISO-800 F2	36.9206	36.9512	0.083%	N/C	45.01	25.77	-31.33%
						45.01	39.25	
						45.01	27.70	

HELICAL COILS/WIRE B-HFC-134a/Emery 2927 Iso-32 Oil @ 260°F(127°C)

500 HRS in HFC-134a/Emery 2927 Iso-32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE EPM OXLEY GLASS	U-475 A1	32.8750	32.9734	0.299%	N/C	40.14	39.10	-6.19%
						40.14	35.12	
						40.14	38.75	
	Y-390 B1	37.0028	37.1111	0.293%	N/C	36.12	33.02	-9.00%
						36.12	34.22	
						36.12	31.37	
	ER-610 C1	37.6621	37.7579	0.254%	N/C	35.96	28.65	-5.14%
						35.96	34.62	
						35.96	39.07	
	Y-833 D1	35.5528	35.5779	0.071%	N/C	33.14	25.80	-28.77%
						33.14	21.20	
						33.14	23.82	
	923 E1	37.8763	37.9514	0.198%	N/C	40.52	35.82	-12.17%
						40.52	34.80	
						40.52	36.15	
	ISO-800 F1	37.6999	37.8049	0.279%	N/C	20.20	23.22	15.99%
						20.20	24.20	
						20.20	22.87	
500 HRS in HFC-134a/Emery 2927 Iso-32 @ 260 F -> 24 HRS 302°F								
U-475 A2	37.5542	37.5875	0.089%	N/C	40.14	33.42	-15.86%	
					40.14	32.90		
					40.14	35.00		
Y-390 B2	37.2745	37.3563	0.219%	N/C	36.12	36.77	-8.28%	
					36.12	25.05		
					36.12	37.57		
ER-610 C2	37.8039	37.8415	0.099%	N/C	35.96	32.15	-5.32%	
					35.96	35.17		
					35.96	34.82		
Y-833 D2	35.9763	35.9808	0.013%	N/C	33.14	6.65	-54.72%	
					33.14	20.42		
					33.14	17.95		
923 E2	38.3356	38.3792	0.114%	N/C	40.52	35.70	-14.82%	
					40.52	28.82		
					40.52	39.02		
ISO-800 F2	37.3323	37.3780	0.122%	N/C	20.20	20.20	1.57%	
					20.20	19.60		
					20.20	21.75		

HELICAL COILS/WIRE C-HFC-134a/Emery 2927 Iso-32@ 260°F(127°C)

500 HRS in HFC-134a/Emery 2927 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER IMIDE POLYLAMIDE	U-475 A1	38.0870	38.1604	0.193%	N/C	51.21	68.87	26.41%
						51.21	53.27	
						51.21	72.07	
	Y-390 B1	40.7772	40.8629	0.210%	N/C	50.72	25.62	-45.33%
						50.72	28.27	
						50.72	29.30	
	ER-610 C1	38.3417	38.4092	0.176%	N/C	58.33	21.20	-41.14%
						58.33	21.60	
						58.33	60.20	
	Y-833 D1	38.6073	38.4518	-0.403%	N/C	5.84	14.40	97.89%
						5.84	13.97	
						5.84	6.30	
	923 E1	39.0324	39.0430	0.027%	N/C	49.26	20.87	-52.77%
						49.26	24.47	
						49.26	24.45	
	ISO-800 F1	39.5863	39.6445	0.147%	N/C	36.08	27.95	-11.43%
						36.08	38.37	
						36.08	29.55	
500 HRS in HFC-134a/2927 Iso-32 @ 260 F-> 24 HRS @ 102°F								
U-475 A2	38.1675	38.1954	0.073%	N/C	51.21	69.27	4.99%	
					51.2	32.75		
					51.	59.27		
Y-390 B2	40.4902	40.5341	0.108%	N/C	50.72	30.17	-34.90%	
					50.72	37.37		
					50.72	31.52		
ER-610 C2	36.7841	36.8038	0.054%	N/C	58.33	55.87	-14.86%	
					58.33	52.77		
					58.33	40.35		
Y-833 D2	39.1440	39.0237	-0.307%	N/C	5.84	11.40	219.92%	
					5.84	21.85		
					5.84	22.80		
923 E2	40.2110	40.2544	0.108%	N/C	49.26	26.57	-40.44%	
					49.26	29.10		
					49.26	32.35		
ISO-800 F2	39.9054	39.9363	0.077%	N/C	36.08	20.42	-29.72%	
					36.08	24.65		
					36.08	31.00		

500 HRS in HFC-134a/2927 Iso-32 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.7518	3.7541	0.061%	N/C	
					YES
B1	3.4677	3.4752	0.216%	N/C	
					YES
C1	3.236	3.2378	0.056%	N/C	
					YES
500 HRS in HFC-134a/ 2927 Iso-32-> 302°F for 24 HRS					
A2	3.6826	3.6839	0.035%	N/C	
					YES
B2	3.4569	3.481	0.697%	N/C	
					YES
C2	3.2563	3.2569	0.018%	N/C	
					YES

500 HRS in HFC-134a/2927 Iso-32 @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTERIMIDE POLYAMIDE	U-475 A1	3.7952	3.7987	0.092%	N/C	
						YES
	Y-390 B1	3.6717	3.6748	0.084%	N/C	
						NO
	ER-610 C1	4.1437	4.1471	0.082%	N/C	
						YES
	Y-833 D1	3.9875	3.9929	0.135%	N/C	
						YES
	923 E1	4.2850	4.2914	0.149%	N/C	
						NO
	ISO-800 F1	4.2046	4.2095	0.117%	N/C	
						NO
HFC-134a/2927 Iso-32 @ 260°F -> 24 HRS @ 302F						
U-475 A2	3.8417	3.8425	0.021%	N/C		
					YES	
Y-390 B2	3.9196	3.9219	0.059%	N/C		
					NO	
ER-610 C2	4.1580	4.1581	0.002%	N/C		
					Yes	
Y-833 D2	3.8550	3.8560	0.026%	N/C		
					YES	
923 E2	4.3173	4.3183	0.023%	N/C		
					NO	
ISO-800 F2	3.9649	3.9701	0.131%	N/C		
					NO	

		500 HRS in HFC-134a/2927 Iso-32 @ 260°F					
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX	
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	4.4345	4.4435	0.203%	N/C	NO	
	Y-390 B1	4.0251	4.0342	0.226%	N/C	NO	
	ER-610 C1	3.9528	3.9604	0.192%	N/C	NO	
	Y-833 D1	4.3190	4.3246	0.130%	N/C	YES	
	923 E1	3.8405	3.8473	0.177%	N/C	NO	
	ISO-800 F1	3.8175	3.8280	0.275%	N/C	NO	
	HFC-134a/2927 500 hr exp. plus 24 hrs.@302°F						
	U-475 A2	4.3696	4.3653	-0.098%	N/C	NO	
	Y-390 B2	3.5175	3.5708	1.515%	N/C	NO	
	ER-610 C2	3.7770	3.7768	-0.005%	N/C	NO	
	Y-833 D2	4.3480	4.3504	0.055%	N/C	YES	
	923 E2	4.1582	4.1626	0.106%	N/C	NO	
	ISO-800 F2	3.6408	3.6449	0.113%	N/C	NO	

500 HRS in HFC-134a/Emery 2927 Iso-32 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE	U-475 A1	4.2894	4.2952	0.135%	N/C	YES
	Y-390 B1	4.1904	4.1953	0.117%	N/C	NO
	ER-610 C1	4.2421	4.2424	0.007%	N/C	YES
	Y-833 D1	3.9809	3.9843	0.085%	N/C	YES
	923 E1	4.3647	4.3708	0.140%	N/C	NO
	ISO-800 F1	4.3752	4.3823	0.162%	N/C	NO
	HFC-134a/2927 Iso-32 -> 24 HRS @ 302°F					
	U-475 A2	4.3767	4.3763	-0.009%	N/C	YES
	Y-390 B2	3.9793	3.9829	0.090%	N/C	NO
	ER-610 C2	4.2380	4.2438	0.137%	N/C	NO
	Y-833 D2	4.3032	4.3043	0.026%	N/C	YES
	923 E2	4.3876	4.3910	0.077%	N/C	NO
	ISO-800 F2	4.2405	4.2432	0.064%	N/C	NO

Varnish Disks---HFC-134a/Emery 2927 Iso-32 Oil

500 HRS IN R-134a/Emery 2927 Iso -32@ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.3095	2.3381	1.24%	N/C	N/C
Y-390 B1	2.2329	2.2163	0.74%	Slightly warped	N/C
ER-610 C1	1.9911	2.0554	3.23%	N/C	N/C
Y-833 D1	2.6668	2.7099	1.62%	N/C	N/C
923 E1	1.7901	1.7890	-0.06%	N/C	N/C
ISO-800 F1	1.4654	1.3866	-5.38%	Slightly warped	N/C
R-134a/Emery 2927 at --->24 hour at 302°F.					
U-475 A2	2.3525	2.3423	-0.43%	darkened	N/C
Y-390 B2	1.9161	1.8659	-2.62%	darkened	N/C
ER-610 C2	2.4518	2.4511	-0.03%	darkened	N/C
Y-833 D2	2.1826	2.1154	-3.08%	N/C	N/C
923 E2	1.8626	1.8343	-1.52%	N/C	N/C
ISO-800 F2	1.7650	1.6090	-8.84%	darkened	N/C

500 HRS in HFC-134a/Emery 2927 Iso-32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	%CHANGE TENSILE
NO/MY/NO A1	4.3952	4.7209	7.41%	0.495	166.80	21	17.4	16.05	
				0.479	163.60	21	17.4	16.26	-10.25%
				0.356	108.70	21	17.4	14.54	
DA/MY/DA B1	4.4028	4.6162	4.85%	0.407	114.00	21	13.7	13.34	
				0.388	102.20	21	13.7	12.54	-5.43%
				0.370	100.90	21	13.7	12.99	
MYLAR MO C1	2.2364	2.2632	1.20%	0.374	59.75	10	21.7	15.98	
				0.448	74.50	10	21.7	16.63	-23.68%
				0.440	75.15	10	21.7	17.08	
NO 410 D1	2.2370	2.5275	12.99%	0.507	90.00	10	18.7	17.75	
				0.525	98.90	10	18.7	18.84	-1.51%
				0.501	93.50	10	18.7	18.66	
NO MI 418 E1	2.2359	2.6527	18.64%	0.492	30.80	10	7.5	6.26	
				0.516	33.95	10	7.5	6.58	-15.03%
				0.489	30.70	10	7.5	6.28	
MEL 228 F1	2.4203	2.4576	1.54%	0.441	70.80	10	21.7	16.05	
				0.403	65.95	10	21.7	16.36	-25.41%
				0.408	65.85	10	21.7	16.14	
500 HRS in HFC-134a/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	4.6612	4.8529	4.11%	0.482	170.50	21	17.4	16.84	
				0.452	153.10	21	17.4	16.13	-4.15%
				0.445	159.40	21	17.4	17.06	
DA/MY/DA B2	4.5564	4.6714	2.52%	0.409	114.40	21	13.7	13.32	
				0.400	106.70	21	13.7	12.70	-5.70%
				0.350	93.60	21	13.7	12.73	
MYLAR MO C2	2.3432	2.3414	-0.08%	0.455	72.40	10	21.7	15.91	
				0.460	72.90	10	21.7	15.85	-27.05%
				0.426	67.00	10	21.7	15.73	
NOMEX 410 D2	2.1797	2.3348	7.12%	0.497	96.75	10	18.7	19.47	
				0.499	95.25	10	18.7	19.09	0.93%
				0.492	88.90	10	18.7	18.07	
NO/MI 418 E2	2.5016	2.9763	18.98%	0.516	31.20	10	7.5	6.05	
				0.496	30.90	10	7.5	6.23	-17.86%
				0.494	30.65	10	7.5	6.20	
MEL 228 F2	2.6559	2.6608	0.18%	0.410	68.55	10	21.7	16.72	
				0.418	70.00	10	21.7	16.75	-22.50%
				0.450	76.45	10	21.7	16.99	

SHEET INSULATION-HFC-134a/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-134a/Emery 2927 Iso-32 @ 260 F								
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	VISUAL EXP
NO/MY/NO A1	0.50	12.5%	20.0%		>18.97	flash		1 piece had 1 small bubble the rest N/C
	0.54	13.5%	20.0%	-35.0%	>18.97	flash	flash	
	0.42	10.5%	20.0%		>18.97	flash		
DA/MY/DA B1	0.54	27.0%	46.0%		>15.27	flash		Yellowed slightly warped
	0.42	21.0%	46.0%	-47.5%	>15.27	flash	flash	
	0.49	24.5%	46.0%		>15.27	flash		
MYLAR MO C1	1.82	91.0%	131.0%		>14.91	flash		N/C
	2.09	104.5%	131.0%	-20.1%	>14.91	flash	flash	
	2.37	118.5%	131.0%		>14.91	flash		
NO 410 D1	0.32	16.0%	17.0%		10.67	flash		N/C
	0.44	11.0%	17.0%	-28.4%	10.67	flash	flash	
	0.38	9.5%	17.0%		10.67	flash		
NO MI 418 E1	0.04	1.0%	4.0%		10.23	10.79		N/C
	0.05	1.3%	4.0%	-72.9%	10.23	11.66	5.4%	
	0.04	1.0%	4.0%		10.23	9.89		
MEL 228 F1	2.65	132.5%	160.0%		>14.22	flash		N/C
	3.24	162.0%	160.0%	-11.5%	>14.22	flash	flash	
	2.61	130.5%	160.0%		>14.22	flash		
500 HRS in HFC-134a/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F								
NO/MY/NO A2	0.66	16.5%	20.0%		>18.97	flash		Delamination big pockets
	0.54	13.5%	20.0%	-23.3%	>18.97	flash	flash	
	0.64	16.0%	20.0%		>18.97	flash		
DA/MY/DA B2	0.46	23.0%	46.0%		>15.27	flash		Yellowed slightly warped
	0.47	23.5%	46.0%	-48.6%	>15.27	flash	flash	
	0.49	24.5%	46.0%		>15.27	flash		
MYLAR MO C2	2.91	145.5%	131.0%		>14.91	flash		N/C
	2.64	132.0%	131.0%	-3.2%	>14.91	flash	flash	
	2.06	103.0%	131.0%		>14.91	flash		
NOMEX 410 D2	0.42	10.5%	17.0%		10.67	11.81		N/C 1 piece had 1 bubble
	0.42	10.5%	17.0%	-43.6%	10.67	12.10	6.3%	
	0.31	7.8%	17.0%		10.67	10.13		
NO/MI 418 E2	0.05	1.3%	4.0%		10.23	11.76		N/C
	0.04	1.0%	4.0%	-70.8%	10.23	11.54	10.6%	
	0.05	1.3%	4.0%		10.23	10.63		
MEL 228 F2	1.87	93.5%	160.0%		>14.22	flash		N/C
	1.66	83.0%	160.0%	-43.9%	>14.22	flash	flash	
	1.86	93.0%	160.0%		>14.22	flash		

500 HRS in HFC-134a/Emery 2927 Iso-32 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5542	0.6212	12.09%	N/C
B1 MYLAR	0.5021	0.5120	1.97%	N/C
C1 NO/MY	0.3908	0.4087	4.58%	N/C
HFC-134a/Emery 2927 Iso-32 oil @ 260°F plus24 hrs @ 302°F				
A2 NOMEX	0.5500	0.5955	8.27%	N/C
B2 MYLAR	0.4776	0.4783	0.15%	N/C
C2 NO/MY	0.4087	0.4189	2.50%	N/C
				some pockets where mylar
				pulled away.

500 HRS in HFC-134a/Emery 2927 Iso32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.8596	1.8608	0.06%	39.02	46.25		0.04	2.00%	N/C
				39.02	52.97	28.09%	0.05	2.50%	
				39.02	50.72		0.05	2.50%	
B1 Polyester	0.6546	0.6597	0.78%	56.12	63.12		0.81	40.50%	N/C
				56.12	62.65	5.29%	0.77	38.50%	
				56.12	51.50		0.42	21.00%	
C1 Permacel	1.6603	1.7861	7.58%	88.50	83.70		0.14	7.00%	Slightly
				88.50	93.20	-4.96%	0.13	6.50%	darkened
				88.50	75.42		0.12	6.00%	
500 HRS in HFC-134a/Emery 2927 ISO32 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.7392	1.8018	3.60%	39.02	43.15		0.06	3.00%	N/C
				39.02	51.55	18.70%	0.06	3.00%	
				39.02	44.25		0.07	3.50%	
B2 Polyester	0.6804	0.6751	-0.78%	56.12	51.75		0.47	23.50%	N/C
				56.12	57.25	-2.29%	0.60	30.00%	
				56.12	55.50		0.57	28.50%	
C2 Permacel	1.5897	1.6247	2.20%	88.50	93.85		0.15	7.50%	Slightly
				88.50	100.40	8.76%	0.16	8.00%	Darkened
				88.50	94.50		0.15	7.50%	

500 HRS IN R-134a/2927 Iso-32 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2648	0.2668	0.76%	N/C	28.36	33.25		0.43	21.5%
					28.36	31.85	14.07%	0.41	20.5%
					28.36	31.95		0.38	19.0%
500 HRS IN R-134a/Emery 2927 -> 24 HRS @ 302°F									
A2	0.2468	0.2503	1.418%	N/C	28.36	32.60		0.42	21.0%
					28.36	30.70	9.37%	0.42	21.0%
					28.36	29.75		0.38	19.0%

LEAD WIRE INSULATION-HFC-134a/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS IN HFC-134a/Emery 2927 Iso-32 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.0292	4.1895	3.98%	N/C	9.61	9.22	
A1					9.61	7.92	-13.39%
					9.61	7.83	
DTMD	4.3703	4.5104	3.21%	N/C	9.95	11.43	
B1					9.95	12.14	22.38%
					9.95	12.96	
HFC-134a/Emery 2927 Iso-32 @ 260°F -> 24 HRS @ 302°F							
DMD	4.0344	4.1522	2.92%	N/C	9.61	8.71	
A2					9.61	8.50	-6.90%
					9.61	9.63	
DTMD	4.4165	4.5197	2.34%	N/C	9.95	10.51	
B2					9.95	12.26	12.23%
					9.95	10.73	

Appendix H

**Experimental Data for HFC-32/Henkel-
Emery 2927 ISO-32 Exposure at
126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-32/Emery 2927 Iso-32 oil @260°F(127°C)

500 hours in HFC-32/2927 Iso-32 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	22.2661	22.2758	0.044%	N/C	576	555		15.80	17.08	
					576	427	-12.4%	15.80	15.90	3.3%
					576	532		15.80	16.00	
B1	24.1414	24.1778	0.151%	N/C	736	655		11.62	11.53	
					736	733	-4.1%	11.62	11.56	0.4%
					736	730		11.62	11.91	
C1	23.9948	24.0051	0.043%	N/C	579	437		16.58	11.80	
					579	411	-27.9%	16.58	16.05	-10.0%
					579	404		16.58	16.90	
500 hours in HFC-32/Emkarate RL244 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	22.367	22.3669	0.000%	N/C	576	535		15.80	11.61	
					576	521	-6.4%	15.80	12.65	-18.8%
					576	561		15.80	14.23	
B2	23.1092	23.1090	-0.001%	N/C	736	732		11.62	11.64	
					736	731	-3.5%	11.62	11.59	1.0%
					736	668		11.62	11.99	
C2	22.6258	22.6261	0.001%	N/C	579	495		16.58	14.23	
					579	485	-14.7%	16.58	9.81	-26.4%
					579	502		16.58	12.58	

TWISTED PAIRS/WIRE A/WITH VARNISH-HFC-32/Emery 2927 Iso-32 oil @260°F(127°C)

500 hours in HFC-32/Emery 2927 Iso-32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
P O L Y E S T E R P O L Y A M I D E I M I D E	U-475 A1	22.8343	22.8508	0.072%	N/C	16.24	10.97		430	421	
						16.24	14.61	-16.77%	430	379	-17.44%
						16.24	14.97		430	265	
	Y-390 B1	22.8994	22.9350	0.155%	N/C	18.77	17.80		510	577	
						18.77	15.14	-10.12%	510	568	0.46%
						18.77	17.67		510	392	
	ER-610 C1	23.7197	23.7382	0.078%	N/C	15.57	15.31		442	314	
						15.57	14.33	-5.15%	442	290	-28.96%
						15.57	14.66		442	338	
	Y-833 D1	22.7504	22.7342	-0.071%	N/C	12.04	16.60		578	565	
						12.04	16.33	23.03%	578	569	-6.11%
						12.04	11.51		578	494	
I M I D E	923 E1	22.2736	22.3233	0.223%	N/C	16.76	19.66		606	449	
						16.76	19.74	10.64%	606	500	-19.97%
						16.76	16.23		606	506	
	ISO-800 F1	21.5768	21.6072	0.141%	N/C	19.08	12.71		580	470	
						19.08	17.34	-13.64%	580	395	-27.82%
						19.08	19.38		580	391	
	500 hours in HFC-32/Emery 2927 Iso-32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)										
	U-475 A2	22.3743	22.3718	-0.011%	N/C	16.24	8.44		430	367	
						16.24	13.77	-32.20%	430	344	-13.02%
						16.24	10.82		430	411	
	Y-390 B2	23.7128	23.7186	0.024%	N/C	18.77	19.84		510	388	
						18.77	8.06	-33.71%	510	415	-17.39%
						18.77	9.43		510	461	
	ER-610 C2	22.6394	22.6372	-0.010%	N/C	15.57	11.47		442	363	
						15.57	11.95	-20.92%	442	350	-17.80%
						15.57	13.52		442	377	
	Y-833 D2	23.0497	23.0255	-0.105%	N/C	12.04	11.85		578	548	
						12.04	10.07	-4.07%	578	557	-5.07%
						12.04	12.73		578	541	
I M I D E	923 E2	22.3218	22.3268	0.022%	N/C	16.76	13.13		606	433	
						16.76	11.04	-26.31%	606	445	-27.78%
						16.76	12.88		606	435	
I M I D E	ISO-800 F2	22.4286	22.4379	0.041%	N/C	19.08	19.75		580	338	
						19.08	14.00	-15.55%	580	441	-33.68%
						19.08	14.59		580	375	

TWISTED PAIRS/WIRE B/WITH VARNISH -HFC-132/Emery 2927 Iso-32 oil @260°F(127°C)

500 HOURS in HFC-32/2927 Iso-32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	WT% Change	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MID E IMIDE EPOXY GLASS	U-475 A1	25.2057	25.2684	0.25%	N/C	13.32	11.54		746	737	
						13.32	11.30	-17.24%	746	742	-0.31%
						13.32	10.23		746	752	
	Y-390 B1	25.1841	25.2553	0.28%	N/C	12.28	11.21		755	743	
						12.28	13.94	-3.26%	755	741	-1.81%
						12.28	10.49		755	740	
	ER-610 C1	23.6837	23.7202	0.15%	N/C	12.73	11.14		734	731	
						12.73	12.77	-8.54%	734	733	-0.23%
						12.73	11.02		734	733	
	Y-833 D1	22.1479	22.1650	0.08%	N/C	12.49	12.00		734	728	
						12.49	10.91	-6.75%	734	729	-0.77%
						12.49	12.03		734	728	
	923 E1	25.4154	25.4638	0.19%	N/C	14.38	16.25		742	756	
						14.38	13.73	-4.08%	742	754	1.93%
						14.38	11.40		742	759	
	ISO-800 F1	23.5684	23.6336	0.28%	N/C	12.29	13.30		747	734	
						12.29	13.20	5.37%	747	743	-1.16%
						12.29	12.35		747	738	
HFC-32/2927 Iso-32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
U-475 A2	25.8775	25.8832	0.02%	N/C	13.32	14.08		746	744		
					13.32	12.02	-0.73%	746	742	-0.31%	
					13.32	13.57		746	745		
Y-390 B2	25.3319	25.3427	0.04%	N/C	12.28	11.92		755	739		
					12.28	11.77	-3.58%	755	750	-1.39%	
					12.28	11.83		755	732		
ER-610 C2	23.1779	23.1792	0.01%	N/C	12.73	10.97		734	728		
					12.73	10.59	-10.79%	734	730	-0.54%	
					12.73	12.51		734	732		
Y-833 D2	21.8713	21.8595	-0.05%	N/C	12.49	11.60		734	690		
					12.49	11.14	-7.39%	734	728	-2.54%	
					12.49	11.96		734	728		
923 E2	25.2663	25.2601	-0.02%	N/C	14.38	11.90		742	750		
					14.38	13.03	-17.69%	742	756	1.08%	
					14.38	10.58		742	750		
ISO-800 F2	24.3483	24.3747	0.11%		12.29	12.38		747	740		
				N/C	12.29	13.30	2.12%	747	727	-1.81%	
					12.29	11.97		747	749		

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-32/Emery 2927 Iso-32 @ 260°F(127°C)

500 Hours in HFC-32/2927 Iso-32 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE POLYAMIDE	U-475 A1	23.0534	23.0713	0.078%	N/C	15.10	15.09		469	438	
						15.10	9.94	-15.34%	469	311	-11.51%
						15.10	13.32		469	496	
	Y-390 B1	22.6953	22.7384	0.190%	N/C	18.24	19.49		473	445	
						18.24	19.85	2.41%	473	457	-5.29%
						18.24	16.70		473	442	
	ER-610 C1	22.9745	22.9894	0.065%	N/C	14.53	14.52		494	321	
						14.53	13.77	-5.07%	494	302	-34.75%
						14.53	13.09		494	344	
	Y-833 D1	22.3520	22.3442	-0.035%	N/C	11.38	11.49		557	559	
						11.38	13.53	12.10%	557	371	-25.85%
						11.38	13.25		557	309	
	923 E1	21.9561	22.0159	0.272%	N/C	15.85	9.73		503	534	
						15.85	19.53	-1.18%	503	534	4.37%
						15.85	17.73		503	507	
	ISO-800 F1	22.3501	22.3807	0.137%	N/C	14.75	18.22		632	409	
						14.75	19.75	18.15%	632	415	-27.06%
						14.75	14.31		632	559	
	HFC-32/2927 Iso-32 @ 260°F plus 24 hours @ 302°F(150°C)										
	U-475 A2	21.6516	21.6340	-0.081%	N/C	15.10	16.56		469	283	
						15.10	18.49	8.32%	469	308	-37.24%
						15.10	14.02		469	292	
	Y-390 B2	23.3489	23.3600	0.048%	N/C	18.24	10.73		473	505	
						18.24	11.41	-37.01%	473	516	0.63%
						18.24	11.57		473	407	
	ER-610 C2	21.7141	21.7095	-0.021%	N/C	14.53	16.08		494	322	
						14.53	12.50	-7.82%	494	319	-32.52%
						14.53	11.60		494	359	
	Y-833 D2	23.2975	23.2789	-0.080%	N/C	11.38	12.59		557	627	
						11.38	9.73	-6.27%	557	539	-2.75%
						11.38	9.68		557	459	
	923 E2	22.9748	22.9765	0.007%	N/C	15.85	13.86		503	549	
						15.85	18.94	10.43%	503	551	8.48%
						15.85	19.71		503	537	
	ISO-800 F2	22.4335	22.4411	0.034%	N/C	14.75	10.41		632	414	
						14.75	16.43	-9.38%	632	388	-26.58%
						14.75	13.26		632	590	

HELICAL COILS/WIRE A---HFC-32/Emery 2927 Iso-32 @260°F(127°C)

500 HRS in HFC-32/2927 Iso-32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE	U-475 A1	39.5050	39.5675	0.158%	N/C	73.73	30.15	-61.28%
						73.73	25.35	
						73.73	30.15	
	Y-390 B1	39.5146	39.5743	0.151%	N/C	43.78	31.60	-36.39%
						43.78	21.40	
						43.78	30.55	
	ER-610 C1	38.7575	38.9948	0.612%	N/C	51.81	50.65	-8.09%
						51.81	51.70	
						51.81	40.50	
	Y-833 D1	38.6839	38.6363	-0.123%	N/C	9.85	18.10	94.92%
						9.85	13.50	
						9.85	26.00	
	923 E1	40.7581	40.7979	0.098%	N/C	41.28	29.40	-28.01%
						41.28	31.90	
						41.28	27.85	
	ISO-800 F1	38.9420	38.9815	0.101%	N/C	45.01	44.10	-2.80%
						45.01	43.40	
						45.01	45.52	
500 HRS in HFC-32/2927 Iso-32 @ 260 F -> 24 HRS 302°F								
U-475 A2	39.1707	39.1905	0.051%	N/C	73.73	61.45	-31.95%	
					73.73	49.70		
					73.73	50.65		
Y-390 B2	38.8366	38.8747	0.098%	N/C	43.78	37.15	-20.85%	
					43.78	35.60		
					43.78	31.20		
ER-610 C2	39.3157	39.3189	0.008%	N/C	51.81	34.40	-23.41%	
					51.81	36.25		
					51.81	48.40		
Y-833 D2	39.0471	38.9444	-0.263%	N/C	9.85	11.60	172.08%	
					9.85	34.55		
					9.85	34.25		
923 E2	39.8700	39.8654	-0.012%	N/C	41.28	37.55	-8.82%	
					41.28	36.50		
					41.28	38.87		
ISO-800 F2	37.8458	37.8573	0.030%	N/C	45.01	39.32	6.51%	
					45.01	63.65		
					45.01	40.85		

HELICAL COILS/WIRE B-HFC-32/Emery 2927 Iso-32 Oil @ 260°F(127°C)

500 HRS in HFC-32/Emery 2927 Iso-32 @ 260 F									
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE	
POLYESTER POLYAMIDE MID E IMIDE EP OX Y GL ASS	U-475 A1	37.6020	37.6764	0.198%	N/C	40.14	29.87	-25.60%	
							40.14		31.17
							40.14		28.55
	Y-390 B1	38.4927	38.5895	0.251%	N/C	36.12	32.25	-8.57%	
							36.12		27.75
							36.12		39.07
	ER-610 C1	38.3750	38.4481	0.190%	N/C	35.96	26.67	-28.88%	
							35.96		24.75
							35.96		25.30
	Y-833 D1	36.7175	36.6289	-0.241%	N/C	33.14	17.37	-47.59%	
							33.14		broke
							33.14		broke
	923 E1	37.9097	37.9682	0.154%	N/C	40.52	38.82	-20.76%	
							40.52		25.95
							40.52		31.55
	ISO-800 F1	35.8433	35.9072	0.178%	N/C	20.20	19.42	-3.12%	
							20.20		broke
							20.20		19.72
500 HRS in HFC-32/Emery 2927 Iso-32 @ 260 F -> 24 HRS 302°F									
U-475 A2	37.7606	37.7856	0.066%	N/C	40.14	32.30	-22.55%		
						40.14		33.07	
						40.14		27.90	
Y-390 B2	37.8150	37.8518	0.097%	N/C	36.12	30.07	-16.68%		
						36.12		26.32	
						36.12		33.90	
ER-610 C2	38.2920	38.3127	0.054%	N/C	35.96	24.80	-31.06%		
						35.96		22.60	
						35.96		26.97	
Y-833 D2	36.2557	36.2279	-0.077%	N/C	33.14	1.85	-70.43%		
						33.14		10.90	
						33.14		16.65	
923 E2	37.7957	37.8016	0.016%	N/C	40.52	28.50	-32.94%		
						40.52		27.97	
						40.52		25.05	
ISO-800 F2	37.7162	37.7297	0.036%	N/C	20.20	15.12	-23.37%		
						20.20		14.42	
						20.20		16.90	

HELICAL COILS/WIRE C-HFC-32/Emery 2927 Iso-32@ 260°F(127°C)

500 HRS in HFC-32/Emery 2927 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER IMIDE POLYAMIDE	U-475 A1	37.8274	37.8851	0.153%	N/C	51.21	34.72	3.37%
						51.21	63.59	
						51.21	60.50	
	Y-390 B1	40.5103	40.5733	0.156%	N/C	50.72	24.05	-50.43%
						50.72	25.42	
						50.72	25.95	
	ER-610 C1	37.0068	37.5080	1.354%	N/C	58.33	22.95	-46.33%
						58.33	44.82	
						58.33	26.15	
	Y-833 D1	38.7483	38.6172	-0.338%	N/C	5.84	7.30	67.07%
						5.84	6.80	
						5.84	15.17	
	923 E1	39.6056	39.6406	0.088%	N/C	49.26	28.72	-46.79%
						49.26	24.42	
						49.26	25.50	
	ISO-800 F1	38.8999	38.9368	0.095%	N/C	36.08	30.70	-13.44%
						36.08	32.67	
						36.08	30.32	
500 HRS in HFC-32/2927 Iso-32 @ 260 F-> 24 HRS 302°F								
U-475 A2	37.9403	37.9537	0.035%	N/C	51.21	72.32	18.96%	
					51.21	65.02		
					51.21	45.42		
Y-390 B2	40.1086	40.1297	0.053%	N/C	50.72	34.60	-31.30%	
					50.72	35.62		
					50.72	34.32		
ER-610 C2	37.7877	37.7910	0.009%	N/C	58.33	29.30	-31.17%	
					58.33	64.87		
					58.33	26.27		
Y-833 D2	38.2443	38.0612	-0.479%	N/C	5.84	16.82	116.84%	
					5.84	14.17		
					5.84	7.00		
923 E2	39.4140	39.4123	-0.004%	N/C	49.26	25.67	-41.96%	
					49.26	31.70		
					49.26	28.40		
ISO-800 F2	39.2881	39.3053	0.044%	N/C	36.08	41.00	21.57%	
					36.08	35.77		
					36.08	54.82		

SINGLE MAG WIRE WITHOUT VARNISH-HFC-32/ICI Emkarate RL244 @ 260°F(127°C))

500 HRS in HFC-32/2927 Iso-32 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	4.0118	4.013	0.030%	N/C	
					YES
B1	3.5994	3.6035	0.114%	N/C	
					YES
C1	3.6776	3.679	0.038%	N/C	
					YES
500 HRS in HFC-32/ 2927 Iso-32-> 302°F for 24 HRS					
A2	4.0097	4.0099	0.005%	N/C	
					YES
B2	3.4636	3.4631	-0.014%	N/C	
					YES
C2	3.7833	3.7832	-0.003%	N/C	
					YES

SINGLE/WIRE A WITH VARNISH--HFC-32/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS in HFC-32/2927 Iso-32 @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTERIMIDE	U-475 A1	3.7521	3.7546	0.067%	N/C	
						NO
	Y-390 B1	3.9103	3.9148	0.115%	N/C	
						NO
	ER-610 C1	3.6720	3.6733	0.035%	N/C	
						YES
	Y-833 D1	3.7901	3.8006	0.277%	N/C	
						YES
	923 E1	4.4198	4.4309	0.251%	N/C	
						NO
	ISO-800 F1	4.0079	4.0133	0.135%	N/C	
						NO
HFC-32/2927 Iso-32 @ 260°F -> 24 HRS @ 302F						
U-475 A2	3.9559	3.9545	-0.035%	N/C		
					NO	
Y-390 B2	3.6428	3.6437	0.025%	N/C		
					NO	
ER-610 C2	3.6650	3.6632	-0.049%	N/C		
					Yes	
Y-833 D2	3.9860	3.9846	-0.035%	N/C		
					YES	
923 E2	4.3855	4.3855	0.000%	N/C		
					NO	
ISO-800 F2	4.0014	4.0034	0.050%	N/C		
					NO	

SINGLE/WIRE B/WITH VARNISH--HFC-32/Emery 2927 Iso-32 oil @ 260°F(127°C)

		500 HRS in HFC-32/2927 Iso-32 @ 260°F					
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX	
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	4.3271	4.3334	0.146%	N/C		
						NO	
	Y-390 B1	3.8215	3.8270	0.144%	N/C		
						NO	
	ER-610 C1	4.2979	4.3029	0.116%	N/C		
						NO	
	Y-833 D1	4.2056	4.2099	0.102%	N/C		
						YES	
	923 E1	3.9969	4.0044	0.188%	N/C		
						NO	
	ISO-800 F1	3.9006	3.9081	0.192%	N/C		
						NO	
	HFC-32/2927 500 hr exp. plus 24 hrs.@302°F						
U-475 A2	4.3269	4.3223	-0.106%	N/C			
					NO		
Y-390 B2	3.7662	3.7670	0.021%	N/C			
					NO		
ER-610 C2	3.5111	3.5093	-0.051%	N/C			
					NO		
Y-833 D2	4.1904	4.1905	0.002%	N/C			
					YES		
923 E2	3.4806	3.4802	-0.011%	N/C			
					NO		
ISO-800 F2	3.8410	3.8414	0.010%	N/C			
					NO		

SINGLE/WIRE C/WITH VARNISH--HFC-32/Emery 2927 Iso-32 oil 260°F(127°C)

500 HRS in HFC-32/Emery 2927 Iso-32 oil @ 260°F							
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX	
POLYESTER POLYAMIMIDE	U-475 A1	4.2468	4.2535	0.158%	N/C		
						NO	
	Y-390 B1	4.4631	4.4700	0.155%	N/C		
						NO	
	ER-610 C1	4.1587	4.1612	0.060%	N/C		
						YES	
	Y-833 D1	4.0339	4.0352	0.032%	N/C		
						YES	
	923 E1	4.4912	4.4987	0.167%	N/C		
						NO	
	ISO-800 F1	4.2011	4.2057	0.109%	N/C		
						NO	
	HFC-32/2927 Iso-32 -> 24 HRS @ 302°F						
	U-475 A2	4.1719	4.1710	-0.022%	N/C		
						NO	
Y-390 B2	4.4130	4.4145	0.034%	N/C			
					NO		
ER-610 C2	4.1049	4.1041	-0.019%	N/C			
					YES		
Y-833 D2	3.8998	3.8981	-0.044%	N/C			
					YES		
923 E2	4.6275	4.6274	-0.002%	N/C			
					NO		
ISO-800 F2	4.1853	4.1868	0.036%	N/C			
					NO		

Varnish Disks----HFC-32/Emery 2927 Iso-32 Oil

500 HRS IN R-32/Emery 2927 Iso -32@ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	1.9489	1.9639	0.77%	N/C	N/C
Y-390 B1	2.2456	2.2145	1.38%	Slightly warped	N/C
ER-610 C1	2.4929	2.4993	0.26%	N/C	N/C
Y-833 D1	2.0526	2.0369	-0.76%	N/C	N/C
923 E1	1.7123	1.6802	-1.87%	N/C	N/C
ISO-800 F1	1.6437	1.5032	-8.55%	Slightly warped lighter in	N/C color
R-32/Emery 2927 at --->24 hour at 302°F.					
U-475 A2	2.3728	2.3439	-1.22%	darkened	N/C
Y-390 B2	2.0966	2.0266	-3.34%	slightly warped	N/C
ER-610 C2	2.1913	2.1974	0.28%	darkened	N/C
Y-833 D2	2.3819	2.2983	-3.51%	N/C	N/C
923 E2	1.8446	1.7859	-3.18%	N/C	N/C
ISO-800 F2	1.6317	1.4953	-8.36%	slightly warped	N/C

SHEET INSULATION-HFC-32/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-32/Emery 2927 Iso-32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	7.3929	7.9390	7.39%	0.360	115.90	21	17.4	15.33	
				0.436	136.50	21	17.4	14.91	-11.31%
				0.465	156.80	21	17.4	16.06	
DA/MY/DA B1	6.7978	6.7273	-1.04%	0.421	115.70	21	13.7	13.09	
				0.375	91.10	21	13.7	11.57	-8.53%
				0.355	96.45	21	13.7	12.94	
MYLAR MO C1	4.0289	4.0738	1.11%	0.433	70.50	10	21.7	16.28	
				0.519	83.40	10	21.7	16.07	-24.82%
				0.481	79.80	10	21.7	16.59	
NO 410 D1	3.3988	3.8298	12.68%	0.499	92.75	10	18.7	18.59	
				0.451	77.90	10	18.7	17.27	-3.16%
				0.495	91.40	10	18.7	18.46	
NO MI 418 E1	3.7879	4.5382	19.81%	0.480	28.85	10	7.5	6.01	
				0.504	31.65	10	7.5	6.28	-18.46%
				0.492	29.80	10	7.5	6.06	
MEL 228 F1	4.1540	4.2240	1.69%	0.463	69.15	10	21.7	14.94	
				0.443	67.80	10	21.7	15.30	-27.67%
				0.420	70.75	10	21.7	16.85	
500 HRS in HFC-32/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	6.9871	7.2587	3.89%	0.378	108.90	21	17.4	13.72	
				0.365	127.50	21	17.4	16.63	-9.09%
				0.389	139.70	21	17.4	17.10	
DA/MY/DA B2	7.4979	7.4215	-1.02%	0.387	105.10	21	13.7	12.93	
				0.490	129.50	21	13.7	12.59	-6.15%
				0.460	126.10	21	13.7	13.05	
MYLAR MO C2	3.7276	3.7159	-0.31%	0.469	74.70	10	21.7	15.93	
				0.381	60.60	10	21.7	15.91	-24.82%
				0.412	70.50	10	21.7	17.11	
NOMEX 410 D2	3.5330	3.8297	8.40%	0.496	97.95	10	18.7	19.75	
				0.463	88.60	10	18.7	19.14	3.33%
				0.427	81.50	10	18.7	19.09	
NO/MI 418 E2	3.3990	4.0009	17.71%	0.510	30.90	10	7.5	6.06	
				0.506	32.75	10	7.5	6.47	-16.90%
				0.484	29.85	10	7.5	6.17	
MEL 228 F2	4.3911	4.4073	0.37%	0.501	84.30	10	21.7	16.83	
				0.508	85.70	10	21.7	16.87	-22.18%
				0.461	78.20	10	21.7	16.96	

SHEET INSULATION-HFC-32/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-32/Emery 2927 Iso-32 @ 260 F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A1	0.60	15.0%	20.0%		>18.97	flash		Big pockets on each of pieces, pulled away
	0.53	13.3%	20.0%	-29.4%	>18.97	flash	flash	
	0.78	19.5%	20.0%		>18.97	flash		
DA/MY/DA B1	0.53	26.5%	46.0%		>15.27	flash		Yellowed slightly warped
	0.40	20.0%	46.0%	-50.0%	>15.27	flash	flash	
	0.45	22.5%	46.0%		>15.27	flash		
MYLAR MO C1	2.45	122.5%	131.0%		>14.91	flash		N/C
	2.44	122.0%	131.0%	-11.5%	>14.91	flash	flash	
	2.07	103.5%	131.0%		>14.91	flash		
NO 410 D1	0.55	27.5%	17.0%		10.67	flash		N/C
	0.35	8.8%	17.0%	-5.4%	10.67	11.83	10.3%	
	0.48	12.0%	17.0%		10.67	11.70		
NO MI 418 E1	0.05	1.3%	4.0%		10.23	11.31		N/C
	0.04	1.0%	4.0%	-66.7%	10.23	10.61	7.5%	
	0.07	1.8%	4.0%		10.23	11.07		
MEL 228 F1	2.91	145.5%	160.0%		>14.22	flash		slightly yellowed
	2.85	142.5%	160.0%	-5.9%	>14.22	flash	flash	
	3.27	163.5%	160.0%		>14.22	flash		
500 HRS in HFC-32/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A2	0.21	5.3%	20.0%		>18.97	flash		Delamination big pockets
	0.60	15.0%	20.0%	-24.4%	>18.97	flash	flash	
	0.61	15.3%	20.0%		>18.97	flash		
DA/MY/DA B2	0.51	25.5%	46.0%		>15.27	flash		Yellowed slightly warped
	0.54	27.0%	46.0%	-43.1%	>15.27	flash	flash	
	0.52	26.0%	46.0%		>15.27	flash		
MYLAR MO C2	2.34	117.0%	131.0%		>14.91	flash		N/C
	1.79	89.5%	131.0%	-15.0%	>14.91	flash	flash	
	2.55	127.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.51	12.8%	17.0%		10.67	11.11		N/C 1 piece had 1 bubble
	0.47	11.8%	17.0%	-31.4%	10.67	11.47	5.6%	
	0.42	10.5%	17.0%		10.67	11.21		
NO/MI 418 E2	0.04	1.0%	4.0%		10.23	11.91		N/C
	0.04	1.0%	4.0%	-72.9%	10.23	10.89	11.0%	
	0.05	1.3%	4.0%		10.23	11.26		
MEL 228 F2	2.15	107.5%	160.0%		>14.22	flash		slightly yellowed
	2.75	137.5%	160.0%	-30.5%	>14.22	flash	flash	
	1.77	88.5%	160.0%		>14.22	flash		

SLEEVING--HFC-32/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS in HFC-32/Emery 2927 Iso-32 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A 1 NOMEX	0.5445	0.6158	13.09%	N/C
B1 MYLAR	0.4589	0.4678	1.94%	N/C
C1 NO/MY	0.4021	0.4214	4.80%	N/C
HFC-32/Emery Iso-32 oil @ 260°F plus 24 hrs @ 302°F				
A 2 NOMEX	0.5699	0.6109	7.19%	N/C
B2 MYLAR	0.4529	0.4549	0.44%	N/C
				some pockets
C2 NO/MY	0.3969	0.4060	2.29%	N/C
				some pockets where mylar
				pulled away.

TAPE--HFC-32/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-32/Emery 2927 Iso32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.5286	1.5360	0.48%	39.02	43.50		0.05	2.50%	N/C
				39.02	35.00	24.55%	0.05	2.50%	
				39.02	67.30		0.07	3.50%	
B1 Polyester	0.6966	0.6985	0.27%	56.12	59.10		0.70	35.00%	N/C
				56.12	57.60	5.10%	0.65	32.50%	
				56.12	60.25		0.72	36.00%	
C1 Permacel	1.6392	2.4242	47.89%	88.50	56.55		0.14	7.00%	Slightly
				88.50	44.80	-46.87%	0.15	7.50%	darkened
				88.50	39.70		0.14	7.00%	Curled up
500 HRS in HFC-32/Emery 2927 ISO32 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.4776	1.5174	2.69%	39.02	53.20		0.06	3.00%	N/C
				39.02	34.30	22.25%	0.04	2.00%	
				39.02	55.60		0.06	3.00%	
B2 Polyester	0.6322	0.6528	3.26%	56.12	52.05		0.54	27.00%	N/C
				56.12	51.95	-6.24%	0.61	30.50%	
				56.12	53.85		0.70	35.00%	
C2 Permacel	1.5103	2.1692	43.63%	88.50	36.80		0.21	10.50%	Slightly
				88.50	40.45	-56.20%	0.15	7.50%	Darkened
				88.50	39.05		0.14	7.00%	Curled up

TIE CORD--HFC-32/Emery 2927 ISO-32 oil @ 260°F(127°C)

500 HRS IN R-32/2927 Iso-32 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.3683	0.3679	-0.11%	N/C	28.36	32.10		0.45	22.5%
					28.36	31.50	15.19%	0.42	21.0%
					28.36	34.40		0.44	22.0%
500 HRS IN R-32/Emery 2927 -> 24 HRS @ 302°F									
A2	0.4393	0.439	-0.068%	N/C	28.36	30.55		0.46	23.0%
					28.36	33.30	15.24%	0.45	22.5%
					28.36	34.20		0.49	24.5%

LEAD WIRE INSULATION-HFC-32/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS IN HFC-32/Emery 2927 Iso-32 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	3.9348	4.0656	3.32%	N/C	9.61	8.99	
A 1					9.61	8.70	-6.94%
					9.61	9.14	
DTMD	4.1988	4.3136	2.73%	N/C	9.95	12.25	
B1					9.95	11.63	21.17%
					9.95	12.29	
HFC-32/Emery 2927 Iso-32 @ 260°F -> 24 HRS @ 302°F							
DMD	3.9344	4.0072	1.85%	N/C	9.61	9.32	
A 2					9.61	9.89	-17.59%
					9.61	4.55	
DTMD	4.2128	4.3172	2.48%	N/C	9.95	14.15	
B2					9.95	13.50	40.64%
					9.95	14.33	

Appendix I

**Experimental Data for HFC-125/Henkel-
Emery 2927 ISO-32 Exposure at
126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-125/Emery 2927 Iso-32 oil @260°F(127°C)

500 hours in HFC-125/2927 Iso-32 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	21.9868	21.9926	0.026%	N/C	576	542		15.80	15.11	
					576	433	-17.6%	15.80	16.10	-5.0%
					576	449		15.80	13.83	
B1	24.4029	24.4357	0.134%	N/C	736	728		11.62	10.87	
					736	735	-7.0%	11.62	12.39	2.5%
					736	591		11.62	12.46	
C1	22.7713	22.8330	0.271%	N/C	579	548		16.58	13.90	
					579	410	-12.4%	16.58	16.18	-4.0%
					579	564		16.58	17.65	
500 hours in HFC-125/Emery 2927 Iso-32 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	22.8158	22.8188	0.013%	N/C	576	350		15.80	14.75	
					576	473	-24.7%	15.80	14.22	-10.2%
					576	478		15.80	13.58	
B2	25.225	25.2291	0.016%	N/C	736	728		11.62	11.00	
					736	582	-7.6%	11.62	11.26	-3.7%
					736	730		11.62	11.32	
C2	22.8455	22.8489	0.015%	N/C	579	447		16.58	15.13	
					579	414	-20.8%	16.58	12.24	-22.0%
					579	514		16.58	11.44	

TWISTED PAIRS/WIRE A/WITH VARNISH-HFC-125/Emery 2927 Iso-32 oil @260°F(127°C)

500 hours in HFC-125/Emery 2927 Iso-32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MID E	U-475 A1	22.4530	22.4590	0.027%	N/C	16.24	13.32		430	290	
						16.24	15.38	-14.80%	430	329	-23.57%
						16.24	12.81		430	367	
	Y-390 B1	23.9087	23.9291	0.085%	N/C	18.77	19.81		510	395	
						18.77	19.87	5.82%	510	394	-21.37%
						18.77	19.91		510	414	
	ER-610 C1	22.4630	22.4705	0.033%	N/C	15.57	11.47		442	403	
						15.57	12.58	-22.44%	442	380	-14.10%
						15.57	12.18		442	356	
	Y-833 D1	23.8725	23.8610	-0.048%	N/C	12.04	12.65		578	461	
						12.04	13.45	10.33%	578	457	-20.93%
						12.04	13.75		578	453	
	923 E1	22.7707	22.7991	0.125%	N/C	16.76	13.24		606	551	
						16.76	19.10	-11.18%	606	484	-17.88%
						16.76	12.32		606	458	
	ISO-800 F1	23.7819	23.7958	0.058%	N/C	19.08	17.40		580	572	
						19.08	18.24	-5.19%	580	565	-4.43%
						19.08	18.63		580	526	
500 hours in HFC-125/Emery 2927 Iso-32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
MID E	U-475 A2	23.2361	23.2368	0.003%	N/C	16.24	10.89		430	367	
						16.24	11.37	-34.48%	430	373	-12.79%
						16.24	9.66		430	385	
	Y-390 B2	23.8013	23.8185	0.072%	N/C	18.77	18.24		510	393	
						18.77	17.41	-1.19%	510	383	-23.73%
						18.77	19.99		510	391	
	ER-610 C2	22.3660	22.3682	0.010%	N/C	15.57	8.77		442	378	
						15.57	12.21	-27.66%	442	370	-12.07%
						15.57	12.81		442	418	
	Y-833 D2	23.5070	23.4905	-0.070%	N/C	12.04	10.85		578	457	
						12.04	11.22	-7.75%	578	489	-19.09%
						12.04	11.25		578	457	
	923 E2	22.9660	22.9776	0.051%	N/C	16.76	19.60		606	532	
						16.76	15.30	8.91%	606	573	-11.33%
						16.76	19.86		606	507	
	ISO-800 F2	23.5627	23.5685	0.025%	N/C	19.08	13.48		580	578	
						19.08	11.74	-29.26%	580	462	-6.95%
						19.08	15.27		580	579	

TWISTED PAIRS/WIRE B/WITH VARNISH -HFC-125/Emery 2927 Iso-32 oil @260°F(127°C)

500 HOURS in HFC-125/2927 Iso-32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	WT% Change	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE IMIDE EPOXY GLASS	U-475 A1	25.6214	25.6637	0.17%	N/C	13.32	19.75		746	736	
						13.32	19.75	40.57%	746	741	-1.65%
						13.32	16.67		746	724	
	Y-390 B1	26.3412	26.3922	0.19%	N/C	12.28	10.67		755	733	
						12.28	13.48	1.22%	755	739	-2.21%
						12.28	13.14		755	743	
	ER-610 C1	27.2075	27.2237	0.06%	N/C	12.73	14.36		734	734	
						12.73	14.44	6.15%	734	732	-0.27%
						12.73	11.74		734	730	
	Y-833 D1	25.0428	25.0538	0.04%	N/C	12.49	13.59		734	732	
						12.49	12.02	-0.19%	734	730	-0.50%
						12.49	11.79		734	729	
	923 E1	26.5529	26.5809	0.11%	N/C	14.38	13.62		742	740	
						14.38	13.50	8.69%	742	757	0.49%
						14.38	19.77		742	740	
	ISO-800 F1	25.5117	25.5154	0.01%	N/C	12.29	11.85		747	736	
						12.29	13.93	7.19%	747	737	-1.25%
						12.29	13.74		747	740	
HFC-125/2927 Iso-32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
	U-475 A2	24.8889	24.8972	0.03%	N/C	13.32	13.10		746	732	
						13.32	10.48	-13.61%	746	741	-1.83%
						13.32	10.94		746	724	
	Y-390 B2	25.6818	25.7139	0.12%	N/C	12.28	12.46		755	733	
						12.28	12.92	1.22%	755	740	-2.45%
						12.28	11.91		755	738	
	ER-610 C2	27.1490	27.4513	1.11%	N/C	12.73	12.31		734	733	
						12.73	12.40	-5.08%	734	724	-0.91%
						12.73	11.54		734	725	
	Y-833 D2	25.5018	25.4862	-0.06%	N/C	12.49	12.30		734	730	
						12.49	12.56	-3.12%	734	732	-0.18%
						12.49	11.44		734	736	
	923 E2	26.2957	26.3106	0.06%	N/C	14.38	12.61		742	731	
						14.38	16.50	-0.53%	742	743	-1.48%
						14.38	13.80		742	741	
	ISO-800 F2	25.6352	25.6508	0.06%		12.29	11.33		747	747	
					N/C	12.29	12.02	-3.39%	747	733	-0.94%
						12.29	12.27		747	734	

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-125/Emery 2927 Iso-32 @ 260°F(127°C)

500 Hours in HFC-125/2927 Iso-32 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE POLYAMIDEIMIDE	U-475 A1	23.5710	23.5869	0.067%	N/C	15.10	19.78		469	265	
						15.10	19.34	9.05%	469	313	-34.97%
						15.10	10.28		469	337	
	Y-390 B1	23.9186	23.9489	0.127%	N/C	18.24	17.65		473	502	
						18.24	18.51	1.85%	473	486	3.10%
						18.24	19.57		473	475	
	ER-610 C1	23.5858	23.5898	0.017%	N/C	14.53	15.54		494	269	
						14.53	12.84	-1.28%	494	253	-48.11%
						14.53	14.65		494	247	
	Y-833 D1	23.2975	23.2944	-0.013%	N/C	11.38	10.94		557	465	
						11.38	12.65	2.78%	557	397	-23.58%
						11.38	11.50		557	415	
	923 E1	23.9276	23.9514	0.099%	N/C	15.85	19.89		503	585	
						15.85	19.92	25.76%	503	508	14.71%
						15.85	19.99		503	638	
	ISO-800 F1	24.3076	24.3627	0.227%	N/C	14.75	12.26		632	579	
						14.75	12.49	0.63%	632	567	-9.44%
						14.75	19.78		632	571	
HFC-125/2927 Iso-32 @ 260°F plus 24 hours @ 302°F(150°C)											
U-475 A2	23.8565	23.8529	-0.015%	N/C	15.10	13.85		469	558		
					15.10	cracked	-3.15%	469	343	-11.23%	
					15.10	15.40		469	348		
Y-390 B2	23.8834	23.8896	0.026%	N/C	18.24	19.25		473	584		
					18.24	18.79	-0.88%	473	396	1.55%	
					18.24	17.37		473	461		
ER-610 C2	24.0193	24.0171	-0.009%	N/C	14.53	16.46		494	421		
					14.53	12.34	1.12%	494	322	-26.25%	
					14.53	15.28		494	350		
Y-833 D2	23.5253	23.5177	-0.032%	N/C	11.38	11.58		557	456		
					11.38	11.45	-2.46%	557	541	-6.46%	
					11.38	10.27		557	566		
923 E2	23.5530	23.5526	-0.002%	N/C	15.85	19.99		503	569		
					15.85	13.61	9.00%	503	553	13.39%	
					15.85	18.23		503	589		
ISO-800 F2	24.6467	24.6665	0.080%	N/C	14.75	cracked		632	559		
					14.75	17.23	17.15%	632	555	-20.99%	
					14.75	17.33		632	384		

HELICAL COILS/WIRE A---HFC-125/Emery 2927 Iso-32 @260°F(127°C)

	500 HRS in HFC-125/2927 Iso-32 @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE	U-475 A1	40.3196	40.3534	0.084%	N/C	73.73	66.75	-9.19%
						73.73	71.75	
						73.73	62.37	
	Y-390 B1	39.2367	39.2598	0.059%	N/C	43.78	33.42	-27.68%
						43.78	26.14	
						43.78	35.42	
	ER-610 C1	38.1452	38.1680	0.060%	N/C	51.81	68.95	31.55%
						51.81	67.95	
						51.81	67.57	
	Y-833 D1	38.0901	38.0372	-0.139%	N/C	9.85	27.35	172.34%
						9.85	26.30	
						9.85	broken	
	923 E1	39.6110	39.6272	0.041%	N/C	41.28	33.55	-22.61%
						41.28	33.37	
						41.28	28.92	
	ISO-800 F1	40.1642	40.1778	0.034%	N/C	45.01	58.27	14.24%
						45.01	44.57	
						45.01	55.50	
500 HRS in HFC-125/2927 Iso-32 @ 260 F -> 24 HRS 302°F								
U-475 A2	36.6456	36.6474	0.005%	N/C	73.73	62.35	-2.47%	
					73.73	82.30		
					73.73	61.52		
Y-390 B2	40.0699	40.0770	0.018%	N/C	43.78	50.85	12.40%	
					43.78	43.10		
					43.78	53.67		
ER-610 C2	39.6237	39.6251	0.004%	N/C	51.81	83.72	31.74%	
					51.81	57.07		
					51.81	63.97		
Y-833 D2	37.6776	37.6031	-0.198%	N/C	9.85	45.17	301.93%	
					9.85	31.00		
					9.85	42.60		
923 E2	39.5605	39.6664	0.268%	N/C	41.28	33.57	-12.37%	
					41.28	35.20		
					41.28	39.75		
ISO-800 F2	38.3899	38.3944	0.012%	N/C	45.01	41.77	-1.92%	
					45.01	46.92		
					45.01	43.75		

HELICAL COILS/WIRE B-HFC-125/Emery 2927 Iso-32 Oil @ 260°F(127°C)

	500 HRS in HFC-125/Emery 2927 Iso-32 @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE EPIXY GLASS	U-475 A1	37.0686	37.1048	0.098%	N/C	40.14	31.55	-25.12%
						40.14	28.85	
						40.14	29.77	
	Y-390 B1	37.9747	38.0096	0.092%	N/C	36.12	40.27	14.40%
						36.12	41.32	
						36.12	42.37	
	ER-610 C1	36.7359	36.7681	0.088%	N/C	35.96	27.67	-20.87%
						35.96	30.25	
						35.96	27.45	
	Y-833 D1	35.6944	35.6795	-0.042%	N/C	33.14	48.87	20.14%
						33.14	25.02	
						33.14	45.55	
	923 E1	36.9907	37.0113	0.056%	N/C	40.52	37.70	-8.75%
						40.52	37.97	
						40.52	35.25	
	ISO-800 F1	36.2408	36.2695	0.079%	N/C	20.20	10.95	-26.73%
						20.20	11.95	
						20.20	21.50	
	500 HRS in HFC-125/Emery 2927 Iso-32 @ 260 F -> 24 HRS 302°F							
U-475 A2	36.4628	36.4722	0.026%	N/C	40.14	28.50	-16.43%	
					40.14	36.47		
					40.14	35.67		
Y-390 B2	37.3953	37.4210	0.069%	N/C	36.12	43.17	15.40%	
					36.12	44.05		
					36.12	37.82		
ER-610 C2	37.2815	36.9642	-0.851%	N/C	35.96	28.82	-15.15%	
					35.96	29.45		
					35.96	33.27		
Y-833 D2	37.0231	37.2908	0.723%	N/C	33.14	40.87	7.87%	
					33.14	28.20		
					33.14	38.17		
923 E2	37.2594	37.2690	0.026%	N/C	40.52	30.02	-19.46%	
					40.52	32.42		
					40.52	35.47		
ISO-800 F2	36.7570	36.7698	0.035%	N/C	20.20	17.52	-3.20%	
					20.20	20.87		
					20.20	20.27		

HELICAL COILS/WIRE C-HFC-125/Emery 2927 Iso-32@ 260°F(127°C)

	500 HRS in HFC-125/Emery 2927 @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTERIMIDE	U-475 A1	37.6545	37.6805	0.069%	N/C	51.21	46.90	18.19%
						51.21	69.67	
						51.21	65.00	
	Y-390 B1	39.2386	39.2552	0.042%	N/C	50.72	23.77	-42.84%
						50.72	35.65	
						50.72	27.55	
	ER-610 C1	37.7415	37.7681	0.070%	N/C	58.33	58.25	-20.50%
						58.33	61.52	
						58.33	19.35	
	Y-833 D1	37.6804	37.5195	-0.427%	N/C	5.84	2.25	-70.32%
						5.84	1.75	
						5.84	1.20	
	923 E1	39.2840	39.2947	0.027%	N/C	49.26	25.12	-50.01%
						49.26	25.20	
						49.26	23.55	
	ISO-800 F1	39.3750	39.3731	-0.005%	N/C	36.08	25.27	-37.51%
						36.08	24.07	
						36.08	18.30	
	500 HRS in HFC-125/2927 Iso-32 @ 260 F-> 24 HRS 302°F							
POLYAMIDEIMIDE	U-475 A2	37.4365	37.4403	0.010%	N/C	51.21	67.22	34.62%
						51.21	67.15	
						51.21	72.45	
	Y-390 B2	39.4162	39.4319	0.040%	N/C	50.72	33.10	-22.70%
						50.72	41.57	
						50.72	42.95	
	ER-610 C2	36.9074	36.9099	0.007%	N/C	58.33	42.80	-16.97%
						58.33	54.05	
						58.33	48.45	
	Y-833 D2	38.2132	38.0645	-0.389%	N/C	5.84	5.03	168.66%
						5.84	16.97	
						5.84	25.07	
	923 E2	39.5608	39.5642	0.009%	N/C	49.26	34.27	-33.76%
						49.26	30.55	
						49.26	33.07	
	ISO-800 F2	38.6341	38.6495	0.040%	N/C	36.08	21.40	-28.91%
						36.08	21.40	
						36.08	34.15	

SINGLE MAG WIRE WITHOUT VARNISH-HFC-125/Emery 2927 Iso-32@ 260°F(127°C))

500 HRS in HFC-125/2927 Iso-32 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.0322	3.0329	0.023%	N/C	
					YES
B1	3.3354	3.3400	0.138%	N/C	
					YES
C1	3.3243	3.3244	0.003%	N/C	
					YES
500 HRS in HFC-125/ 2927 Iso-32-> 302°F for 24 HRS					
A2	3.1630	3.1623	-0.022%	N/C	
					YES
B2	3.6183	3.6187	0.011%	N/C	
					YES
C2	3.2230	3.2228	-0.006%	N/C	
					YES

500 HRS in HFC-125/2927 Iso-32 @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER IMIDE POLYAMIDE	U-475 A1	4.3454	4.3492	0.087%	N/C	
						NO
	Y-390 B1	3.7784	3.7809	0.066%	N/C	
						NO
	ER-610 C1	3.5690	3.5704	0.039%	N/C	
						YES
	Y-833 D1	3.8852	3.8859	0.018%	N/C	
						YES
	923 E1	4.3229	4.3256	0.062%	N/C	
						NO
	ISO-800 F1	4.1581	4.1607	0.063%	N/C	
						NO
HFC-125/2927 Iso-32 @ 260°F -> 24 HRS @ 302F						
U-475 A2	4.3768	4.3779	0.025%	N/C		
					YES	
Y-390 B2	3.7891	3.7893	0.005%	N/C		
					NO	
ER-610 C2	3.9544	3.9539	-0.013%	N/C		
					Yes	
Y-833 D2	4.2329	4.2310	-0.045%	N/C		
					YES	
923 E2	4.4648	4.4650	0.004%	N/C		
					NO	
ISO-800 F2	4.1882	4.1889	0.017%	N/C		
					NO	

		500 HRS in HFC-125/2927 Iso-32 @ 260°F					
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX	
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	3.9111	3.9142	0.079%	N/C	NO	
	Y-390 B1	3.8985	3.9051	0.169%	N/C	NO	
	ER-610 C1	4.2210	4.2244	0.081%	N/C	YES	
	Y-833 D1	4.2997	4.3020	0.053%	N/C	YES	
	923 E1	4.1897	4.1934	0.088%	N/C	NO	
	ISO-800 F1	3.5994	3.6024	0.083%	N/C	NO	
	HFC-125/2927 500 hr exp. plus 24 hrs. @ 302°F						
	U-475 A2	3.9410	3.9398	-0.030%	N/C	NO	
	Y-390 B2	3.6204	3.6214	0.028%	N/C	NO	
	ER-610 C2	4.2945	4.2932	-0.030%	N/C	YES	
	Y-833 D2	4.2486	4.2476	-0.024%	N/C	YES	
	923 E2	4.0998	4.1005	0.017%	N/C	NO	
	ISO-800 F2	4.3764	4.3780	0.037%	N/C	NO	

SINGLE/WIRE C/WITH VARNISH--HFC-125/Emery 2927 Iso-32 oil 260°F(127°C)

500 HRS in HFC-125/Emery 2927 Iso-32 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
P O L Y E S T E R P O L Y A M I D E I M I D E	U-475 A1	4.1684	4.1713	0.070%	N/C	
						NO
	Y-390 B1	3.6578	3.6590	0.033%	N/C	
						NO
	ER-610 C1	3.8005	3.8003	-0.005%	N/C	
						YES
	Y-833 D1	3.8249	3.8253	0.010%	N/C	
						YES
	923 E1	4.5154	4.5183	0.064%	N/C	
						NO
	ISO-800 F1	4.1046	4.1061	0.037%	N/C	
						NO
	HFC-125/2927 Iso-32 -> 24 HRS @ 302°F					
	U-475 A2	4.2141	4.2139	-0.005%	N/C	
						YES
	Y-390 B2	3.8242	3.8248	0.016%	N/C	
						NO
	ER-610 C2	3.6489	3.6485	-0.011%	N/C	
						NO
	Y-833 D2	3.8175	3.8164	-0.029%	N/C	
						YES
	923 E2	4.5760	4.5766	0.013%	N/C	
						NO
	ISO-800 F2	4.0182	4.0183	0.002%	N/C	
						NO

Varnish Disks----HFC-125/Emery 2927 Iso 32 Oil

500 HRS IN R-125/Emery 2927 Iso -32@ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.6493	2.5922	-2.16%	N/C	N/C
Y-390 B1	2.1438	2.1044	1.84%	Slightly warped	N/C
ER-610 C1	2.4810	2.5116	1.23%	N/C	N/C
Y-833 D1	2.6583	2.6801	0.82%	lightly greened	N/C
923 E1	2.2984	2.2518	-2.03%	slightly warped	N/C
ISO-800 F1	2.1103	2.0774	-1.56%	Slightly warped lighter in	N/C color
R-125/Emery 2927 at --->24 hour at 302°F.					
U-475 A2	2.3801	2.3084	-3.01%	darkened	N/C
Y-390 B2	1.9410	1.8872	-2.77%	darkened slightly warped	N/C
ER-610 C2	2.9145	2.9043	-0.35%	darkened	N/C
Y-833 D2	4.0109	4.0258	0.37%	N/C	N/C
923 E2	2.4654	2.4104	-2.23%	slightly warped	N/C
ISO-800 F2	2.5525	2.4927	-2.34%	slightly warped darkened	N/C

SHEET INSULATION-HFC-125/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-125/Emery 2927 Iso-32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	%CHANGE TENSILE
NO/MY/NO A1	4.3662	4.6332	6.12%	0.438	153.40	21	17.4	16.68	
				0.377	133.60	21	17.4	16.88	-4.91%
				0.458	154.70	21	17.4	16.08	
DA/MY/DA B1	4.4747	4.4957	0.47%	0.401	102.30	21	13.7	12.15	
				0.417	119.00	21	13.7	13.59	-4.99%
				0.372	104.00	21	13.7	13.31	
MYLAR MO C1	2.4546	2.4713	0.68%	0.416	66.85	10	21.7	16.07	
				0.432	81.20	10	21.7	18.80	-17.79%
				0.498	92.90	10	21.7	18.65	
NO 410 D1	2.2107	2.4688	11.68%	0.482	88.55	10	18.7	18.37	
				0.496	91.45	10	18.7	18.44	-1.44%
				0.495	91.50	10	18.7	18.48	
NO MI 418 E1	2.0653	2.4040	16.40%	0.505	33.00	10	7.5	6.53	
				0.475	29.85	10	7.5	6.28	-14.74%
				0.498	31.70	10	7.5	6.37	
MEL 228 F1	2.2582	2.2773	0.85%	0.485	82.15	10	21.7	16.94	
				0.402	68.70	10	21.7	17.09	-21.79%
				0.429	72.45	10	21.7	16.89	
500 HRS in HFC-125/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	4.7334	4.9167	3.87%	0.374	126.50	21	17.4	16.11	
				0.465	160.90	21	17.4	16.48	-5.33%
				0.381	134.70	21	17.4	16.84	
DA/MY/DA B2	4.7424	4.7161	-0.55%	0.410	114.20	21	13.7	13.26	
				0.455	133.20	21	13.7	13.94	-1.08%
				0.479	135.30	21	13.7	13.45	
MYLAR MO C2	2.3293	2.3425	0.57%	0.432	71.15	10	21.7	16.47	
				0.460	75.35	10	21.7	16.38	-22.10%
				0.409	73.05	10	21.7	17.86	
NOMEX 410 D2	2.2802	2.4520	7.53%	0.422	82.05	10	18.7	19.44	
				0.476	69.20	10	18.7	14.54	-5.75%
				0.430	81.25	10	18.7	18.90	
NO/MI 418 E2	1.9159	2.2334	16.57%	0.505	32.85	10	7.5	6.50	
				0.517	32.35	10	7.5	6.26	-15.97%
				0.485	29.80	10	7.5	6.14	
MEL 228 F2	2.3149	2.3218	0.30%	0.478	79.95	10	21.7	16.73	
				0.485	81.65	10	21.7	16.84	-22.37%
				0.405	68.75	10	21.7	16.98	

SHEET INSULATION-HFC-125/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-125/Emery 2927 Iso-32 @ 260 F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A1	0.64	16.0%	20.0%		>18.97	flash		N/C
	0.55	13.8%	20.0%	-25.6%	>18.97	flash	flash	
	0.47	11.8%	20.0%		>18.97	flash		
DA/MY/DA B1	0.48	24.0%	46.0%		>15.27	flash		slightly yellowed slightly warped
	0.53	26.5%	46.0%	-47.5%	>15.27	flash	flash	
	0.44	22.0%	46.0%		>15.27	flash		
MYLAR MO C1	2.44	122.0%	131.0%		>14.91	flash		N/C
	2.82	141.0%	131.0%	5.3%	>14.91	flash	flash	
	3.02	151.0%	131.0%		>14.91	flash		
NO 410 D1	0.39	19.5%	17.0%		10.67	flash		N/C
	0.36	9.0%	17.0%	-27.9%	10.67	flash	flash	
	0.33	8.3%	17.0%		10.67	flash		
NO MI 418 E1	0.04	1.0%	4.0%		10.23	8.81		N/C
	0.05	1.3%	4.0%	-72.9%	10.23	9.01	-14.2%	
	0.04	1.0%	4.0%		10.23	8.51		
MEL 228 F1	2.85	142.5%	160.0%		>14.22	flash		very slightly yellowed
	2.29	114.5%	160.0%	-17.6%	>14.22	flash	flash	
	2.77	138.5%	160.0%		>14.22	flash		
500 HRS in HFC-125/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A2	0.45	11.3%	20.0%		>18.97	flash		delamination big pockets
	0.51	12.8%	20.0%	-24.4%	>18.97	flash	flash	
	0.70	17.5%	20.0%		>18.97	flash		
DA/MY/DA B2	0.49	24.5%	46.0%		>15.27	flash		Yellowed/Browned slightly warped
	0.49	24.5%	46.0%	-46.4%	>15.27	flash	flash	
	0.50	25.0%	46.0%		>15.27	flash		
MYLAR MO C2	2.19	109.5%	131.0%		>14.91	flash		N/C
	2.12	106.0%	131.0%	-9.7%	>14.91	flash	flash	
	2.79	139.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.40	10.0%	17.0%		10.67	11.69		N/C 1 piece had 1 bubble
	0.17	4.3%	17.0%	-52.9%	10.67	11.48	8.9%	
	0.39	9.8%	17.0%		10.67	11.69		
NO/MI 418 E2	0.05	1.3%	4.0%		10.23	9.71		N/C
	0.05	1.3%	4.0%	-68.8%	10.23	10.40	1.2%	
	0.05	1.3%	4.0%		10.23	10.96		
MEL 228 F2	2.80	140.0%	160.0%		>14.22	flash		very slightly yellowed
	2.77	138.5%	160.0%	-5.9%	>14.22	flash	flash	
	3.46	173.0%	160.0%		>14.22	flash		

SLEEVING--HFC-125/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS in HFC-125/Emery 2927 Iso-32 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5415	0.6130	13.20%	N/C
B1 MYLAR	0.4713	0.4787	1.57%	If rolled bewteen fingers would become cloudy
C1 NO/MY	0.3926	0.4112	4.74%	N/C
HFC-125/Emery Iso 32 oil @ 260°F plus24 hrs @ 302°F				
A2 NOMEX	0.5365	0.5772	7.59%	Slightly Darkened
B2 MYLAR	0.4859	0.4904	0.93%	N/C some pockets
C2 NO/MY	0.3984	0.4055	1.78%	N/C some pockets where mylar pulled away.

500 HRS in HFC-125/Emery 2927 Iso32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.7033	1.8260	7.20%	39.02	61.17		0.06	3.00%	N/C
				39.02	45.95	10.06%	0.05	2.50%	
				39.02	21.72		0.03	1.50%	
B1 Polyester	0.7162	0.7240	1.09%	56.12	51.05		0.40	20.00%	N/C
				56.12	59.15	-1.48%	0.60	30.00%	
				56.12	55.67		0.50	25.00%	
C1 Permacel	1.4730	2.1331	44.81%	88.50	51.15		0.12	6.00%	Slightly
				88.50	27.80	-57.43%	0.11	5.50%	darkened
				88.50	34.07		0.08	4.00%	Curled up
500 HRS in HFC-125/Emery 2927 ISO32 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.8214	1.7039	-6.45%	39.02	47.90		0.07	3.50%	N/C
				39.02	64.80	51.72%	0.06	3.00%	
				39.02	64.90		0.06	3.00%	
B2 Polyester	0.5782	0.5797	0.26%	56.12	54.95		0.55	27.50%	N/C
				56.12	60.00	3.71%	0.74	37.00%	
				56.12	59.65		0.69	34.50%	
C2 Permacel	1.3434	1.7317	28.90%	88.50	68.40		0.17	8.50%	Slightly
				88.50	75.00	-16.08%	0.16	8.00%	Darkened
				88.50	79.40		0.15	7.50%	Curled up

TIE CORD--HFC-125/Emery 2927 ISO-32 oil @ 260°F(127°C)

500 HRS IN R-125/2927 Iso-32 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.3245	0.3268	0.71%	N/C	28.36	35.32		0.40	20.0%
					28.36	34.25	21.79%	0.41	20.5%
					28.36	34.05		0.38	19.0%
500 HRS IN R-125/Emery 2927 -> 24 HRS @ 302°F									
A2	0.2956	0.295	-0.203%	N/C	28.36	32.20		0.41	20.5%
					28.36	33.75	18.71%	0.48	24.0%
					28.36	35.05		0.39	19.5%

LEAD WIRE INSULATION-HFC-125/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS IN HFC-125/Emery 2927 Iso-32 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.1351	4.3079	4.18%	N/C	9.61	7.71	
A1					9.61	8.34	-16.55%
					9.61	8.01	
DTMD	4.4821	4.6290	3.28%	N/C	9.95	12.17	
B1					9.95	13.01	31.09%
					9.95	13.95	
HFC-125/Emery 2927 Iso-32 @ 260°F -> 24 HRS @ 302°F							
DMD	4.0035	4.1464	3.57%	N/C	9.61	9.50	
A2					9.61	9.73	1.39%
					9.61	10.00	
DTMD	4.3964	4.5274	2.98%	N/C	9.95	12.24	
B2					9.95	12.51	26.43%
					9.95	12.99	

Appendix J

**Experimental Data for HFC-143a/Henkel-
Emery 2927 ISO-32 Exposure at
126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-143a/Emery 2927 Iso-32 oil @260°F(127°C)

500 hours in HFC-143a/2927 Iso-32 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	23.8199	23.8242	0.018%	N/C	576	566		15.80	10.70	
					576	398	-22.6%	15.80	13.73	-18.5%
					576	373		15.80	14.22	
B1	26.9424	26.9826	0.149%	N/C	736	734		11.62	14.30	
					736	638	-10.8%	11.62	12.42	11.8%
					736	598		11.62	12.25	
C1	23.5798	23.5850	0.022%	N/C	579	528		16.58	16.42	
					579	583	-3.6%	16.58	16.25	-9.5%
					579	564		16.58	12.36	
500 hours in HFC-143a/Emery 2927 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	24.7001	24.6989	-0.005%	N/C	576	450		15.80	12.78	
					576	439	-22.7%	15.80	11.25	-13.1%
					576	446		15.80	17.14	
B2	27.3281	27.3177	-0.038%	N/C	736	671		11.62	10.46	
					736	729	-3.5%	11.62	12.04	-2.1%
					736	730		11.62	11.62	
C2	24.0234	24.0229	-0.002%	N/C	579	569		16.58	12.99	
					579	440	-16.9%	16.58	14.66	-14.7%
					579	435		16.58	14.76	

TWISTED PAIRS/WIRE A/WITH VARNISH-HFC-143a/Emery 2927 Iso-32 oil @260°F(127°C)

500 hours in HFC-143a/Emery 2927 Iso-32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MID E I M I D E	U-475 A1	21.9240	21.9440	0.091%	N/C	16.24	18.78		430	400	
						16.24	15.02	7.76%	430	488	12.40%
						16.24	18.70		430	562	
	Y-390 B1	23.8496	23.8730	0.098%	N/C	18.77	4.49		510	573	
						18.77	17.02	-34.67%	510	565	13.73%
						18.77	15.28		510	602	
	ER-610 C1	22.2020	22.2117	0.044%	N/C	15.57	12.09		442	354	
						15.57	16.15	-6.57%	442	382	-16.52%
						15.57	15.40		442	371	
	Y-833 D1	24.0440	24.0333	-0.045%	N/C	12.04	16.90		578	523	
						12.04	16.60	35.11%	578	519	-7.04%
						12.04	15.30		578	570	
	923 E1	22.2117	22.2528	0.185%	N/C	16.76	19.99		606	442	
						16.76	18.80	13.07%	606	520	-20.19%
						16.76	18.06		606	489	
	ISO-800 F1	23.8005	23.8207	0.085%	N/C	19.08	13.84		580	560	
						19.08	14.73	-21.47%	580	509	-9.94%
						19.08	16.38		580	498	
500 hours in HFC-143a/Emery 2927 Iso-32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
U-475 A2	21.9960	21.9824	-0.062%	N/C	16.24	17.06		430	366		
					16.24	15.58	-0.06%	430	408	-16.20%	
					16.24	16.05		430	307		
Y-390 B2	23.9812	23.9843	0.013%	N/C	18.77	13.98		510	401		
					18.77	19.10	-12.75%	510	477	-6.01%	
					18.77	16.05		510	560		
ER-610 C2	22.0314	22.0274	-0.018%	N/C	15.57	12.05		442	331		
					15.57	12.74	-14.02%	442	332	-24.36%	
					15.57	15.37		442	340		
Y-833 D2	23.9912	23.9713	-0.083%	N/C	12.04	12.38		578	457		
					12.04	10.17	-8.80%	578	472	-18.17%	
					12.04	10.39		578	490		
923 E2	22.2722	22.2819	0.044%	N/C	16.76	11.20		606	458		
					16.76	5.00	-40.41%	606	475	-26.29%	
					16.76	13.76		606	407		
ISO-800 F2	24.4472	24.4476	0.002%	N/C	19.08	15.76		580	601		
					19.08	13.42	-26.92%	580	464	-6.32%	
					19.08	12.65		580	565		

TWISTED PAIRS/WIRE B/WITH VARNISH -HFC-143a/Emery 2927 Iso-32 oil @260°F(127°C)

500 HOURS in HFC-143a/2927 Iso-32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	WT% Change	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	26.7364	26.7882	0.19%	N/C	13.32	16.33		746	747	
						13.32	16.95	28.85%	746	729	-1.07%
						13.32	18.21		746	738	
	Y-390 B1	26.9630	27.0373	0.28%	N/C	12.28	13.70		755	739	
						12.28	8.26	-5.89%	755	741	-1.99%
						12.28	12.71		755	740	
	ER-610 C1	25.8041	25.8375	0.13%	N/C	12.73	12.91		734	737	
						12.73	14.52	0.71%	734	738	0.23%
						12.73	11.03		734	732	
	Y-833 D1	25.8621	25.8671	0.02%	N/C	12.49	11.98		734	731	
						12.49	13.27	0.91%	734	734	-0.14%
						12.49	12.56		734	734	
	923 E1	26.3069	26.3802	0.28%	N/C	14.38	13.32		742	750	
						14.38	10.41	-15.16%	742	748	0.85%
						14.38	12.87		742	747	
	ISO-800 F1	30.7829	30.8480	0.21%	N/C	12.29	13.61		747	748	
						12.29	11.10	4.88%	747	736	-0.58%
						12.29	13.96		747	744	
HFC-143a/2927 Iso-32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
	U-475 A2	25.8841	25.8754	-0.03%	N/C	13.32	12.97		746	743	
						13.32	12.61	-7.46%	746	746	-0.18%
						13.32	11.40		746	745	
	Y-390 B2	27.0235	27.0359	0.05%	N/C	12.28	12.59		755	747	
						12.28	12.58	2.44%	755	743	-1.32%
						12.28	12.57		755	740	
	ER-610 C2	30.7630	30.7563	-0.02%	N/C	12.73	13.25		734	730	
						12.73	10.67	-5.73%	734	731	-0.50%
						12.73	12.08		734	730	
	Y-833 D2	26.1481	26.1191	-0.11%	N/C	12.49	13.46		734	734	
						12.49	13.08	4.46%	734	729	-0.36%
						12.49	12.60		734	731	
	923 E2	26.1041	26.1136	0.04%	N/C	14.38	13.75		742	750	
						14.38	10.79	-15.37%	742	752	1.08%
						14.38	11.97		742	744	
	ISO-800 F2	26.4135	26.4217	0.03%		12.29	11.87		747	745	
					N/C	12.29	12.16	-3.31%	747	739	-0.67%
						12.29	11.62		747	747	

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-143a/Emery 2927 Iso-32 @ 260°F(127°C)

500 Hours in HFC-143a/2927 Iso-32 @ 260°F(127°F)												
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE	
POLYESTERIMIDE	U-475 A1	23.8945	23.9123	0.074%	N/C	15.10	19.11		469	401		
						15.10	15.20	15.70%	469	374	-8.96%	
						15.10	18.10		469	506		
	Y-390 B1	24.6968	24.6828	-0.057%	N/C	18.24	17.41		473	422		
						18.24	19.96	4.82%	473	493	5.14%	
						18.24	19.99		473	577		
	ER-610 C1	23.5844	23.5886	0.018%	N/C	14.53	15.26		494	412		
						14.53	9.60	-11.75%	494	360	-28.21%	
						14.53	13.61		494	292		
	Y-833 D1	23.3327	23.3214	-0.048%	N/C	11.38	12.69		557	521		
						11.38	15.11	16.43%	557	582	-1.02%	
						11.38	11.95		557	551		
	923 E1	24.1494	24.1933	0.182%	N/C	15.85	18.30		503	551		
						15.85	7.05	-5.11%	503	469	0.00%	
						15.85	19.77		503	489		
	ISO-800 F1	21.8435	21.8615	0.082%	N/C	14.75	13.21		632	548		
						14.75	11.83	0.90%	632	513	-11.87%	
						14.75	19.61		632	610		
	HFC-143a/2927 Iso-32 @ 260°F plus 24 hours @ 302°F(150°C)											
	U-475 A2	23.9020	23.8833	-0.078%	N/C	15.10	15.39		469	415		
						15.10	15.42	-1.79%	469	416	-20.97%	
						15.10	13.68		469	281		
	Y-390 B2	24.7506	24.7584	0.032%	N/C	18.24	15.90		473	532		
						18.24	12.00	-36.81%	473	408	-1.48%	
					18.24	11.05		473	458			
ER-610 C2	24.2797	24.2714	-0.034%	N/C	14.53	14.28		494	414			
					14.53	14.03	-7.46%	494	376	-23.62%		
					14.53	12.03		494	342			
Y-833 D2	30.9845	30.9571	-0.088%	N/C	11.38	11.10		557	601			
					11.38	10.10	-1.29%	557	522	5.98%		
					11.38	12.47		557	648			
923 E2	24.5975	24.6080	0.043%	N/C	15.85	11.94		503	668			
					15.85	18.42	-0.44%	503	571	12.86%		
					15.85	16.98		503	464			
ISO-800 F2	21.5996	21.6035	0.018%	N/C	14.75	17.72		632	462			
					14.75	15.03	12.63%	632	593	-13.24%		
					14.75	17.09		632	590			

HELICAL COILS/WIRE A---HFC-143a/Emery 2927 Iso-32 @260°F(127°C)

500 HRS in HFC-143a/2927 Iso-32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE	U-475 A1	40.0867	40.1328	0.115%	N/C	73.73	63.72	-34.50%
						73.73	36.42	
						73.73	44.75	
	Y-390 B1	39.8390	39.8742	0.088%	N/C	43.78	28.52	-32.72%
						43.78	31.50	
						43.78	28.35	
	ER-610 C1	38.9132	38.9489	0.092%	N/C	51.81	36.25	-26.05%
						51.81	38.22	
						51.81	40.47	
	Y-833 D1	40.3587	40.3193	-0.098%	N/C	9.85	26.70	149.07%
						9.85	21.70	
						9.85	25.20	
	923 E1	39.3752	39.4058	0.078%	N/C	41.28	27.55	-29.38%
						41.28	28.40	
						41.28	31.50	
	ISO-800 F1	39.4923	39.6798	0.475%	N/C	45.01	48.20	-15.94%
						45.01	27.47	
						45.01	38.02	
500 HRS in HFC-143a/2927 Iso-32 @ 260 F -> 24 HRS 302°F								
U-475 A2	40.0958	40.0458	-0.125%	N/C	73.73	61.35	-37.31%	
					73.73	39.25		
					73.73	53.20		
Y-390 B2	38.4511	38.4549	0.010%	N/C	43.78	25.30	-37.30%	
					43.78	28.10		
					43.78	28.95		
ER-610 C2	39.9849	39.9755	-0.024%	N/C	51.81	47.85	-2.24%	
					51.81	54.55		
					51.81	49.55		
Y-833 D2	40.0538	39.9578	-0.240%	N/C	9.85	30.57	224.50%	
					9.85	26.90		
					9.85	38.42		
923 E2	39.3502	39.3500	-0.001%	N/C	41.28	24.60	-40.27%	
					41.28	28.45		
					41.28	20.92		
ISO-800 F2	38.7807	38.7775	-0.008%	N/C	45.01	40.90	1.42%	
					45.01	31.50		
					45.01	64.55		

HELICAL COILS/WIRE B-HFC-143a/Emery 2927 Iso-32 Oil @ 260°F(127°C)

	500 HRS in HFC-143a/Emery 2927 Iso-32 @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE POLYIMIDE POLYETHER								

HELICAL COILS/WIRE C-HFC-143a/Emery 2927 Iso-32@ 260°F(127°C)

500 HRS in HFC-143a/Emery 2927 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTERIMIDE	U-475 A1	38.1615	38.2060	0.117%	N/C	51.21	24.02	-32.41%
						51.21	39.90	
						51.21	39.92	
	Y-390 B1	40.7515	40.8386	0.214%	N/C	50.72	25.07	-46.28%
						50.72	27.50	
						50.72	29.17	
	ER-610 C1	37.9729	38.0087	0.094%	N/C	58.33	21.77	-51.41%
						58.33	45.10	
						58.33	18.15	
	Y-833 D1	38.9045	38.7517	-0.393%	N/C	5.84	7.00	56.68%
						5.84	broke	
						5.84	11.30	
	923 E1	40.6574	40.6848	0.067%	N/C	49.26	24.67	-50.97%
						49.26	23.87	
						49.26	23.92	
	ISO-800 F1	39.5886	39.6062	0.044%	N/C	36.08	34.87	-17.78%
						36.08	24.15	
						36.08	29.97	
500 HRS in HFC-143a/2927 Iso-32 @ 260 F-> 24 HRS 302°F								
U-475 A2	38.1255	38.1210	-0.012%	N/C	51.21	60.22	-5.77%	
					51.21	55.45		
					51.21	29.10		
Y-390 B2	41.3271	41.3607	0.081%	N/C	50.72	24.55	-46.00%	
					50.72	30.90		
					50.72	26.72		
ER-610 C2	37.0130	37.0094	-0.010%	N/C	58.33	25.50	-22.01%	
					58.33	56.27		
					58.33	54.70		
Y-833 D2	38.7091	38.5439	-0.427%	N/C	5.84	5.10	152.11%	
					5.84	20.92		
					5.84	18.15		
923 E2	40.0347	40.0337	-0.002%	N/C	49.26	25.95	-44.31%	
					49.26	27.25		
					49.26	29.10		
ISO-800 F2	40.4949	40.4978	0.007%	N/C	36.08	26.40	-12.58%	
					36.08	43.80		
					36.08	24.42		

SINGLE MAG WIRE WITHOUT VARNISH-HFC-143a/Emery 2927 Iso-32 @ 260°F(127°C))

500 HRS in HFC-143a/2927 Iso-32 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.1397	3.1392	-0.016%	N/C	
					YES
B1	3.4415	3.445	0.102%	N/C	
					YES
C1	3.8875	3.888	0.013%	N/C	
					YES
500 HRS in HFC-143a/ 2927 Iso-32-> 302°F for 24 HRS					
A2	2.9437	2.943	-0.024%	N/C	
					YES
B2	3.3795	3.3764	-0.092%	N/C	
					YES
C2	3.1789	3.1789	0.000%	N/C	
					YES

2 INCH WIRE A/WITH VARNISH--HFC-143a/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS in HFC-143a/2927 Iso-32 @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTERIMIDE POLYAMIDE	U-475 A1	3.8467	3.8487	0.052%	N/C	
						NO
	Y-390 B1	3.8472	3.8479	0.018%	N/C	
						NO
	ER-610 C1	3.8410	3.8409	-0.003%	N/C	
						YES
	Y-833 D1	4.0479	4.0483	0.010%	N/C	
						YES
	923 E1	4.6385	4.6424	0.084%	N/C	
						NO
ISO-800 F1	3.9671	3.9697	0.066%	N/C		
					NO	
HFC-143a/2927 Iso-32 @ 260°F -> 24 HRS @ 302F						
U-475 A2	3.9156	3.9131	-0.064%	N/C		
					NO	
Y-390 B2	3.9300	3.9293	-0.018%	N/C		
					NO	
ER-610 C2	3.8529	3.8511	-0.047%	N/C		
					Yes	
Y-833 D2	4.0648	4.0643	-0.012%	N/C		
					YES	
923 E2	4.6803	4.6800	-0.006%	N/C		
					NO	
ISO-800 F2	4.1658	4.1654	-0.010%	N/C		
					NO	

		500 HRS in HFC-143a/2927 Iso-32 @ 260°F				
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE EPOXY GLASS	U-475 A1	3.6266	3.6274	0.022%	N/C	YES
	Y-390 B1	3.5996	3.6026	0.083%	N/C	NO
	ER-610 C1	3.9140	3.9177	0.095%	N/C	NO
	Y-833 D1	4.3880	4.3918	0.087%	N/C	NO
	923 E1	4.0000	4.0038	0.095%	N/C	NO
	ISO-800 F1	3.9465	3.9506	0.104%	N/C	NO
	HFC-143a/2927 500 hr exp. plus 24 hrs.@302°F					
	U-475 A2	3.5105	3.5052	-0.151%	N/C	YES
	Y-390 B2	3.5592	3.5592	0.000%	N/C	NO
	ER-610 C2	4.0951	4.0923	-0.068%	N/C	YES
	Y-833 D2	4.3209	4.3195	-0.032%	N/C	NO
	923 E2	4.4143	4.4133	-0.023%	N/C	NO
	ISO-800 F2	3.6614	3.6612	-0.005%	N/C	NO

SINGLE/WIRE C/WITH VARNISH--HFC-143a/Emery 2927 Iso-32 oil 260°F(127°C)

500 HRS in HFC-143a/Emery 2927 Iso-32 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE	U-475 A1	4.0304	4.0344	0.099%	N/C	
						NO
	Y-390 B1	4.5223	4.5260	0.082%	N/C	
						NO
	ER-610 C1	4.1868	4.1872	0.010%	N/C	
						YES
	Y-833 D1	4.0075	4.0077	0.005%	N/C	
						YES
	923 E1	4.4418	4.4448	0.068%	N/C	
						NO
	ISO-800 F1	4.5550	4.5578	0.061%	N/C	
						NO
HFC-143a/2927 Iso-32 -> 24 HRS @ 302°F						
U-475 A2	4.0050	4.0023	-0.067%	N/C		
					YES	
Y-390 B2	4.3987	4.3990	0.007%	N/C		
					NO	
ER-610 C2	4.1543	4.1536	-0.017%	N/C		
					YES	
Y-833 D2	4.1244	4.1236	-0.019%	N/C		
					YES	
923 E2	4.4074	4.4060	-0.032%	N/C		
					NO	
ISO-800 F2	4.3913	4.3914	0.002%	N/C		
					NO	

Varnish Disks---HFC-143a/Emery 2927 Iso 32 Oil

500 HRS IN R-143a/Emery 2927 Iso -32@ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.4280	2.4090	-0.78%	N/C	N/C
Y-390 B1	2.2646	2.1947	3.09%	N/C	N/C
ER-610 C1	2.5289	2.5588	1.18%	N/C	N/C
Y-833 D1	2.6216	2.6212	-0.02%	N/C	N/C
923 E1	1.4781	1.4488	-1.98%	N/C	N/C
ISO-800 F1	1.6443	1.6003	-2.68%	N/C	N/C
				lighter in	color
R-143a/Emery 2927 at --->24 hour at 302°F.					
U-475 A2	2.2079	2.1568	-2.31%	darkened some pockets	N/C
Y-390 B2	1.7525	1.6546	-5.59%	slightly darkened	N/C
ER-610 C2	2.1702	2.1441	-1.20%	darkened	N/C
Y-833 D2	2.3114	2.2724	-1.69%	N/C	N/C
923 E2	1.9701	1.9147	-2.81%	slightly darkened	N/C
ISO-800 F2	1.8043	1.7389	-3.62%	slightly warped darkened	N/C

SHEET INSULATION-HFC-143a/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-143a/Emery 2927 Iso-32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	7.1251	7.5123	5.43%	0.468	155.30	21	17.4	15.80	
				0.325	112.40	21	17.4	16.47	-7.06%
				0.396	135.10	21	17.4	16.25	
DA/MY/DA B1	7.2354	7.3359	1.39%	0.397	110.80	21	13.7	13.29	
				0.408	112.80	21	13.7	13.17	-2.63%
				0.423	120.50	21	13.7	13.57	
MYLAR MO C1	3.7590	3.7849	0.69%	0.418	68.85	10	21.7	16.47	
				0.491	81.95	10	21.7	16.69	-22.25%
				0.340	59.35	10	21.7	17.46	
NO 410 D1	3.5082	3.9127	11.53%	0.520	97.65	10	18.7	18.78	
				0.455	85.10	10	18.7	18.70	0.43%
				0.503	94.85	10	18.7	18.86	
NO MI 418 E1	3.6766	4.2713	16.18%	0.514	29.95	10	7.5	5.83	
				0.486	28.40	10	7.5	5.84	-23.04%
				0.480	27.10	10	7.5	5.65	
MEL 228 F1	4.3058	4.3475	0.97%	0.467	77.65	10	21.7	16.63	
				0.425	69.45	10	21.7	16.34	-24.23%
				0.493	80.65	10	21.7	16.36	
500 HRS in HFC-143a/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	7.4362	7.6394	2.73%	0.395	135.70	21	17.4	16.36	
				0.425	154.50	21	17.4	17.31	-2.90%
				0.387	138.30	21	17.4	17.02	
DA/MY/DA B2	7.5410	7.4617	-1.05%	0.385	104.20	21	13.7	12.89	
				0.461	126.90	21	13.7	13.11	-4.89%
				0.468	128.70	21	13.7	13.10	
MYLAR MO C2	4.1074	4.1039	-0.09%	0.410	69.60	10	21.7	16.98	
				0.485	79.80	10	21.7	16.45	-23.02%
				0.478	79.75	10	21.7	16.68	
NOMEX 410 D2	3.6405	3.8461	5.65%	0.474	93.55	10	18.7	19.74	
				0.490	95.25	10	18.7	19.44	2.79%
				0.418	77.30	10	18.7	18.49	
NO/MI 418 E2	3.5418	3.9607	11.83%	0.504	32.10	10	7.5	6.37	
				0.502	31.00	10	7.5	6.18	-17.47%
				0.502	30.25	10	7.5	6.03	
MEL 228 F2	4.1519	4.1568	0.12%	0.484	82.05	10	21.7	16.95	
				0.432	73.45	10	21.7	17.00	-21.63%
				0.443	75.60	10	21.7	17.07	

SHEET INSULATION-HFC-143a/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-143a/Emery 2927 Iso-32 @ 260 F								
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	VISUAL EXP
NO/MY/NO A1	0.50	12.5%	20.0%		>18.97	flash		Small pockets on each of pieces, pulled away
	0.59	14.8%	20.0%	-31.9%	>18.97	flash	flash	
	0.50	12.5%	20.0%		>18.97	flash		
DA/MY/DA B1	0.50	25.0%	46.0%		>15.27	flash		Yellowed slightly warped
	0.52	26.0%	46.0%	-44.2%	>15.27	flash	flash	
	0.52	26.0%	46.0%		>15.27	flash		
MYLAR MO C1	2.29	114.5%	131.0%		>14.91	flash		N/C
	1.89	94.5%	131.0%	-17.7%	>14.91	flash	flash	
	2.29	114.5%	131.0%		>14.91	flash		
NO 410 D1	0.40	20.0%	17.0%		10.67	flash		N/C
	0.41	10.3%	17.0%	-18.6%	10.67	flash	flash	
	0.45	11.3%	17.0%		10.67	flash		
NO MI 418 E1	0.06	1.5%	4.0%		10.23	11.73		N/C
	0.06	1.5%	4.0%	-62.5%	10.23	9.91	2.8%	
	0.06	1.5%	4.0%		10.23	9.92		
MEL 228 F1	3.07	153.5%	160.0%		>14.22	flash		slightly yellowed
	1.46	73.0%	160.0%	-21.4%	>14.22	flash	flash	
	3.02	151.0%	160.0%		>14.22	flash		
500 HRS in HFC-143a/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F								
NO/MY/NO A2	0.48	12.0%	20.0%		>18.97	flash		Delamination big pockets
	0.60	15.0%	20.0%	-29.2%	>18.97	flash	flash	
	0.62	15.5%	20.0%		>18.97	flash		
DA/MY/DA B2	0.35	17.5%	46.0%		>15.27	flash		Yellowed slightly warped
	0.45	22.5%	46.0%	-52.9%	>15.27	flash	flash	
	0.50	25.0%	46.0%		>15.27	flash		
MYLAR MO C2	2.34	117.0%	131.0%		>14.91	flash		N/C
	2.45	122.5%	131.0%	-14.9%	>14.91	flash	flash	
	1.90	95.0%	131.0%		>14.91	flash		
NOMEX 410 D2	0.43	10.8%	17.0%		10.67	12.29		N/C 1 piece had 1 bubble
	0.38	9.5%	17.0%	-45.6%	10.67	11.56	10.8%	
	0.30	7.5%	17.0%		10.67	11.62		
NO/MI 418 E2	0.05	1.3%	4.0%		10.23	10.10		N/C
	0.05	1.3%	4.0%	-68.8%	10.23	10.97	-1.0%	
	0.05	1.3%	4.0%		10.23	9.31		
MEL 228 F2	2.27	113.5%	160.0%		>14.22	flash		slightly yellowed
	2.42	121.0%	160.0%	-16.6%	>14.22	flash	flash	
	3.32	166.0%	160.0%		>14.22	flash		

SLEEVING--HFC-143a/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS in HFC-143a/Emery 2927 Iso-32 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5741	0.6394	11.37%	N/C
B1 MYLAR	0.5050	0.5120	1.39%	Pockets
C1 NO/MY	0.3988	0.4146	3.96%	some pockets
HFC-143a/Emkarate RL244 oil @ 260°F plus 24 hrs @ 302°F				
A2 NOMEX	0.5559	0.5903	6.19%	N/C
B2 MYLAR	0.4790	0.4783	-0.15%	N/C some pockets
C2 NO/MY	0.3963	0.4000	0.93%	N/C some pockets where mylar pulled away.

500 HRS in HFC-143a/Emery 2927 Iso32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.7175	1.7169	-0.03%	39.02	53.50		0.06	3.00%	N/C
				39.02	52.80	41.64%	0.06	3.00%	
				39.02	59.50		0.06	3.00%	
B1 Polyester	0.7559	0.7620	0.81%	56.12	53.60		0.51	25.50%	N/C
				56.12	57.95	-4.82%	0.60	30.00%	
				56.12	48.70		0.38	19.00%	
C1 Permacel	1.6088	1.6001	-0.54%	88.50	86.60		0.17	8.50%	Slightly
				88.50	60.65	-18.23%	0.13	6.50%	darkened
				88.50	69.85		0.13	6.50%	Curled up
500 HRS in HFC-143a/Emery 2927 ISO32 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.5224	1.5207	-0.11%	39.02	45.25		0.05	2.50%	N/C
				39.02	54.85	41.94%	0.06	3.00%	
				39.02	66.05		0.07	3.50%	
B2 Polyester	0.6862	0.6822	-0.58%	56.12	52.15		0.51	25.50%	N/C
				56.12	51.75	-6.93%	0.46	23.00%	
				56.12	52.80		0.50	25.00%	
C2 Permacel	1.4177	1.2292	-13.30%	88.50	73.50		0.09	4.50%	Slightly
				88.50	106.20	2.22%	0.13	6.50%	Darkened
				88.50	91.70		0.10	5.00%	Curled up

TIE CORD--HFC-143a/Emery 2927 ISO-32 oil @ 260°F(127°C)

500 HRS IN R-143a/2927 Iso-32 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2839	0.2838	-0.04%	N/C	28.36	29.30		0.38	19.0%
					28.36	37.30	18.07%	0.45	22.5%
					28.36	33.85		0.42	21.0%
500 HRS IN R-143a/Emery 2927 -> 24 HRS @ 302°F									
A2	0.3217	0.3188	-0.901%	N/C	28.36	25.50		0.46	23.0%
					28.36	37.55	12.31%	0.47	23.5%
					28.36	32.50		0.42	21.0%

LEAD WIRE INSULATION-HFC-143a/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS IN HFC-143a/Emery 2927 Iso-32 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.1503	4.2912	3.39%	N/C	9.61	9.37	
A 1					9.61	8.59	-18.66%
					9.61	5.49	
DTMD	4.4449	4.5720	2.86%	N/C	9.95	flash	
B1					9.95	12.91	29.75%
					9.95	flash	
HFC-143a/Emery 2927 Iso-32 @ 260°F -> 24 HRS @ 302°F							
DMD	4.0071	4.0820	1.87%	N/C	9.61	9.25	
A2					9.61	9.79	0.38%
					9.61	9.90	
DTMD	4.3087	4.3560	1.10%	N/C	9.95	10.40	
B2					9.95	11.54	8.14%
					9.95	10.34	

Appendix K

**Experimental Data for HFC-134/Henkel-
Emery 2927 ISO-32 Exposure at
126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-134/Emery 2927 Iso-32 oil @260°F(127°C)

500 hours in HFC-134/2927 Iso-32 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	24.3676	24.3803	0.052%	N/C	576	553		15.80	15.27	
					576	464	-9.1%	15.80	16.22	-2.6%
					576	553		15.80	14.66	
B1	26.3649	26.4054	0.154%	N/C	736	734		11.62	12.86	
					736	734	-0.3%	11.62	11.81	9.0%
					736	734		11.62	13.31	
C1	25.4219	25.4334	0.045%	N/C	579	567		16.58	11.74	
					579	418	-10.4%	16.58	12.14	-18.9%
					579	572		16.58	16.46	
500 hours in HFC-134/Emery 2927 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	23.8171	23.8118	-0.022%	N/C	576	541		15.80	15.07	
					576	567	-4.6%	15.80	10.49	-13.0%
					576	540		15.80	15.66	
B2	25.8679	25.8489	-0.073%	N/C	736	729		11.62	11.89	
					736	729	-0.9%	11.62	11.43	-2.0%
					736	730		11.62	10.86	
C2	28.3845	28.3830	-0.005%	N/C	579	565		16.58	15.57	
					579	479	-7.4%	16.58	12.61	-16.6%
					579	565		16.58	13.29	

TWISTED PAIRS/WIRE A/WITH VARNISH-HFC-134/Emery 2927 Iso-32 oil @260°F(127°C)

500 hours in HFC-134/Emery 2927 Iso-32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
P O L Y E S T E R P O L Y A M I D E I M I D E	U-475 A1	19.7596	19.7767	0.087%	N/C	16.24	12.11		430	331	
						16.24	11.30	-23.56%	430	315	-25.43%
						16.24	13.83		430	316	
	Y-390 B1	19.8200	19.8512	0.157%	N/C	18.77	19.58		510	435	
						18.77	19.37	4.67%	510	453	-5.36%
						18.77	19.99		510	560	
	ER-610 C1	19.1433	19.1600	0.087%	N/C	15.57	12.43		442	327	
						15.57	11.72	-15.59%	442	378	-22.62%
						15.57	15.28		442	321	
	Y-833 D1	19.7423	19.7328	-0.048%	N/C	12.04	11.05		578	448	
						12.04	9.90	-19.02%	578	459	-17.53%
						12.04	8.30		578	523	
	923 E1	19.0775	19.1078	0.159%	N/C	16.76	16.45		606	560	
						16.76	17.50	1.28%	606	563	-5.94%
						16.76	cracked		606	587	
	ISO-800 F1	20.3437	20.3722	0.140%	N/C	19.08	17.60		580	555	
						19.08	17.47	-22.94%	580	463	-8.91%
						19.08	15.04		580	567	
500 hours in HFC-134/Emery 2927 Iso-32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
	U-475 A2	19.8676	19.8631	-0.023%	N/C	16.24	13.74		430	358	
						16.24	13.29	-16.78%	430	388	-12.33%
						16.24	cracked		430	385	
	Y-390 B2	19.8500	19.8514	0.007%	N/C	18.77	13.25		510	509	
						18.77	14.56	-22.73%	510	396	-4.38%
						18.77	15.70		510	558	
	ER-610 C2	18.9459	18.9431	-0.015%	N/C	15.57	11.79		442	434	
						15.57	12.31	-16.33%	442	341	-15.16%
						15.57	14.98		442	350	
	Y-833 D2	23.3663	23.3440	-0.095%	N/C	12.04	12.87		578	555	
						12.04	10.96	3.65%	578	543	-10.84%
						12.04	13.61		578	448	
	923 E2	19.4245	19.4296	0.026%	N/C	16.76	14.40		606	541	
						16.76	10.13	-13.35%	606	450	-22.50%
						16.76	19.04		606	418	
	ISO-800 F2	19.9314	19.9317	0.002%	N/C	19.08	16.98		580	603	
						19.08	15.28	-16.51%	580	589	1.49%
						19.08	15.53		580	574	

TWISTED PAIRS/WIRE B/WITH VARNISH -HFC-134/Emery 2927 Iso-32 oil @260°F(127°C)

500 HOURS in HFC-134/2927 Iso-32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	WT% Change	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POPLA MIDE EPM OX YGL ASS	U-475 A1	21.3913	21.4508	0.28%	N/C	13.32	16.14		746	733	
						13.32	15.66	3.75%	746	735	-1.47%
						13.32	9.66		746	737	
	Y-390 B1	22.8025	22.8617	0.26%	N/C	12.28	11.86		755	744	
						12.28	14.11	10.02%	755	743	-0.93%
						12.28	14.56		755	757	
	ER-610 C1	25.2959	25.3386	0.17%	N/C	12.73	13.52		734	727	
						12.73	14.55	9.56%	734	731	-0.54%
						12.73	13.77		734	732	
	Y-833 D1	21.0945	21.1044	0.05%	N/C	12.49	12.55		734	731	
						12.49	14.39	5.31%	734	732	0.09%
						12.49	12.52		734	741	
	923 E1	21.7105	21.7873	0.35%	N/C	14.38	14.20		742	747	
						14.38	16.16	10.15%	742	744	0.72%
						14.38	17.16		742	751	
	ISO-800 F1	22.0783	22.1369	0.27%	N/C	12.29	13.84		747	742	
						12.29	12.49	7.16%	747	741	-0.94%
						12.29	13.18		747	737	
	HFC-134/2927 Iso-32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)										
	U-475 A2	21.1899	21.1853	-0.02%	N/C	13.32	13.87		746	738	
						13.32	14.35	5.68%	746	733	-1.92%
						13.32	14.01		746	724	
	Y-390 B2	22.7572	22.7670	0.04%	N/C	12.28	13.37		755	736	
						12.28	12.85	8.63%	755	745	-1.92%
						12.28	13.80		755	732	
	ER-610 C2	20.9787	20.9767	-0.01%	N/C	12.73	11.56		734	729	
						12.73	12.05	-5.21%	734	727	-0.77%
						12.73	12.59		734	729	
	Y-833 D2	20.8469	20.8272	-0.09%	N/C	12.49	12.37		734	724	
						12.49	12.29	0.43%	734	730	-0.73%
						12.49	12.97		734	732	
	923 E2	21.6418	21.6585	0.08%	N/C	14.38	11.18		742	742	
						14.38	11.04	-22.99%	742	738	0.00%
						14.38	11.00		742	737	
	ISO-800 F2	22.2256	22.2360	0.05%		12.29	13.03		747	755	
					N/C	12.29	13.43	4.42%	747	726	-0.87%
						12.29	12.04		747	756	

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-134/Emery 2927 Iso-32 @ 260°F(127°C)

500 Hours in HFC-134/2927 Iso-32 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE	U-475 A1	19.9950	20.0244	0.147%	N/C	15.10	15.83		469	387	
						15.10	15.00	4.48%	469	492	-11.44%
						15.10	16.50		469	367	
	Y-390 B1	19.6595	19.6997	0.204%	N/C	18.24	19.75		473	559	
						18.24	18.86	-1.44%	473	647	24.88%
						18.24	15.32		473	566	
	ER-610 C1	19.7168	19.7311	0.073%	N/C	14.53	14.50		494	334	
						14.53	12.46	-1.22%	494	413	-22.13%
						14.53	16.10		494	407	
	Y-833 D1	20.0809	20.0781	-0.014%	N/C	11.38	10.36		557	442	
						11.38	9.89	-9.20%	557	603	-4.55%
						11.38	10.75		557	550	
	923 E1	21.0105	21.0441	0.160%	N/C	15.85	17.79		503	583	
						15.85	18.23	15.10%	503	553	12.99%
						15.85	18.71		503	569	
	ISO-800 F1	19.5118	19.5342	0.115%	N/C	14.75	7.99		632	583	
						14.75	16.05	-6.89%	632	588	-8.33%
						14.75	17.16		632	567	
HFC-134/2927 Iso-32 @ 260°F plus 24 hours @ 302°F(150°C)											
U-475 A2	19.5759	19.5623	-0.069%	N/C	15.10	13.40		469	348		
					15.10	13.69	-3.73%	469	475	-16.63%	
					15.10	16.52		469	350		
Y-390 B2	19.5051	19.5124	0.037%	N/C	18.24	14.66		473	574		
					18.24	18.53	-1.15%	473	568	21.56%	
					18.24	17.53		473	583		
ER-610 C2	19.3095	19.3053	-0.022%	N/C	14.53	13.38		494	374		
					14.53	14.36	-8.47%	494	412	-20.45%	
					14.53	12.16		494	lost		
Y-833 D2	20.2166	20.2027	-0.069%	N/C	11.38	9.03		557	602		
					11.38	6.77	-25.81%	557	592	4.37%	
					11.38	9.53		557	550		
923 E2	20.2816	20.2841	0.012%	N/C	15.85	14.42		503	677		
					15.85	15.22	-0.59%	503	615	17.16%	
					15.85	17.63		503	476		
ISO-800 F2	19.3812	19.3834	0.011%	N/C	14.75	15.09		632	608		
					14.75	15.90	0.34%	632	682	-0.63%	
					14.75	13.41		632	594		

HELICAL COILS/WIRE A---HFC-134/Emery 2927 Iso-32 @260°F(127°C)

500 HRS in HFC-134/2927 Iso-32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE	U-475 A1	40.0085	40.0366	0.070%	N/C	73.73	59.87	-24.71%
						73.73	58.95	
						73.73	47.72	
	Y-390 B1	39.2433	39.2893	0.117%	N/C	43.78	30.20	-17.55%
						43.78	39.52	
						43.78	38.57	
	ER-610 C1	39.8346	39.8550	0.051%	N/C	51.81	56.35	17.98%
						51.81	57.02	
						51.81	70.00	
	Y-833 D1	38.4989	38.4494	-0.129%	N/C	9.85	17.10	336.38%
						9.85	70.90	
						9.85	40.95	
	923 E1	39.1558	39.1720	0.041%	N/C	41.28	40.90	-14.33%
						41.28	28.72	
						41.28	36.47	
	ISO-800 F1	41.1702	41.1784	0.020%	N/C	45.01	50.12	10.89%
						45.01	49.70	
						45.01	47.65	
	500 HRS in HFC-134/2927 Iso-32 @ 260 F -> 24 HRS 302°F							
IMIDE	U-475 A2	41.7258	41.7220	-0.009%	N/C	73.73	72.05	-2.69%
						73.73	82.55	
						73.73	60.95	
	Y-390 B2	40.4109	40.4366	0.064%	N/C	43.78	47.15	1.26%
						43.78	37.05	
						43.78	48.80	
	ER-610 C2	40.2520	40.2491	-0.007%	N/C	51.81	56.90	13.43%
						51.81	52.20	
						51.81	67.20	
	Y-833 D2	39.5613	39.4640	-0.246%	N/C	9.85	71.60	535.50%
						9.85	65.67	
						9.85	50.52	
	923 E2	41.1056	41.1088	0.008%	N/C	41.28	44.47	-0.26%
						41.28	39.00	
						41.28	40.05	
	ISO-800 F2	37.3448	37.3318	-0.035%	N/C	45.01	40.35	-1.96%
						45.01	55.82	
						45.01	36.22	

HELICAL COILS/WIRE B-HFC-134/Emery 2927 Iso-32 Oil @ 260°F(127°C)

500 HRS in HFC-134/Emery 2927 Iso-32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER	U-475 A1	38.1499	38.1904	0.106%	N/C	40.14	38.85	-1.04%
						40.14	44.40	
						40.14	35.92	
	Y-390 B1	36.5244	36.5700	0.125%	N/C	36.12	51.15	26.24%
						36.12	41.27	
						36.12	44.37	
	ER-610 C1	38.3854	38.4244	0.102%	N/C	35.96	31.95	-8.31%
						35.96	32.15	
						35.96	34.82	
	Y-833 D1	35.9233	35.7943	-0.359%	N/C	33.14	48.82	53.78%
						33.14	53.12	
						33.14	50.95	
923 E1	38.8019	38.8239	0.057%	N/C	40.52	36.02	11.27%	
					40.52	47.37		
					40.52	51.87		
ISO-800 F1	36.6913	36.7142	0.062%	N/C	20.20	20.42	-0.51%	
					20.20	21.22		
					20.20	18.65		
500 HRS in HFC-134/Emery 2927 Iso-32 @ 260 F -> 24 HRS 302°F								
IMIDE EPOXY GLASS	U-475 A2	38.0984	38.0957	-0.007%	N/C	40.14	38.05	-2.95%
						40.14	34.17	
						40.14	44.65	
	Y-390 B2	37.6995	37.7146	0.040%	N/C	36.12	44.15	19.73%
						36.12	43.57	
						36.12	42.02	
	ER-610 C2	37.9189	37.9212	0.006%	N/C	35.96	29.75	-17.46%
						35.96	30.32	
						35.96	28.97	
	Y-833 D2	37.4640	37.3956	-0.183%	N/C	33.14	39.65	-6.71%
						33.14	24.30	
						33.14	28.80	
923 E2	38.1657	38.1718	0.016%	N/C	40.52	43.05	-8.45%	
					40.52	43.97		
					40.52	24.27		
ISO-800 F2	37.1324	37.1614	0.078%	N/C	20.20	19.97	-2.11%	
					20.20	18.25		
					20.20	21.10		

HELICAL COILS/WIRE C-HFC-134/Emery 2927 Iso-32@ 260°F(127°C)

500 HRS in HFC-134/Emery 2927 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER IMIDE POLYAMIDE IMIDE	U-475 A1	37.7855	37.8107	0.067%	N/C	51.21	59.22	23.28%
						51.21	71.70	
						51.21	58.47	
	Y-390 B1	40.3063	40.3306	0.060%	N/C	50.72	31.52	-30.23%
						50.72	36.32	
						50.72	38.32	
	ER-610 C1	37.6372	37.6632	0.069%	N/C	58.33	71.12	1.14%
						58.33	57.35	
						58.33	48.52	
	Y-833 D1	39.0853	38.9211	-0.420%	N/C	5.84	32.35	459.19%
						5.84	31.32	
						5.84	34.30	
	923 E1	39.1133	39.1488	0.091%	N/C	49.26	28.55	-40.29%
						49.26	31.77	
						49.26	27.92	
	ISO-800 F1	39.9106	39.9353	0.062%	N/C	36.08	40.10	47.22%
						36.08	53.25	
						36.08	66.00	
500 HRS in HFC-134/2927 Iso-32 @ 260 F-> 24 HRS 302°F								
U-475 A2	38.0266	38.0263	-0.001%	N/C	51.21	71.85	16.62%	
					51.21	56.90		
					51.21	50.42		
Y-390 B2	40.8302	40.8596	0.072%	N/C	50.72	37.42	-28.95%	
					50.72	33.97		
					50.72	36.72		
ER-610 C2	38.0053	38.0050	-0.001%	N/C	58.33	51.17	-16.43%	
					58.33	41.80		
					58.33	53.27		
Y-833 D2	39.1531	39.0197	-0.341%	N/C	5.84	29.90	401.83%	
					5.84	29.37		
					5.84	28.65		
923 E2	40.8810	40.8892	0.020%	N/C	49.26	40.67	-19.33%	
					49.26	42.42		
					49.26	36.12		
ISO-800 F2	39.6036	39.6094	0.015%	N/C	36.08	23.72	20.58%	
					36.08	52.15		
					36.08	54.65		

SINGLE MAG WIRE WITHOUT VARNISH-HFC-134/Emery 2927 Iso-32 @ 260°F(127°C))

500 HRS in HFC-134/2927 Iso-32 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.2576	3.315	1.762%	N/C	
					YES
B1	4.0809	4.0857	0.118%	N/C	
					YES
C1	3.3887	3.3874	-0.038%	N/C	
					YES
500 HRS in HFC-134/ 2927 Iso-32-> 302°F for 24 HRS					
A2	3.4983	3.4973	-0.029%	N/C	
					YES
B2	3.9575	3.9542	-0.083%	N/C	
					YES
C2	3.6412	3.6405	-0.019%	N/C	
					YES

SINGLE/WIRE A/WITH VARNISH--HFC-134/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS in HFC-134/2927 Iso-32 @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER IMIDE POLYAMIDE	U-475 A1	3.9455	3.9476	0.053%	N/C	
						YES
	Y-390 B1	3.8234	3.8314	0.209%	N/C	
						NO
	ER-610 C1	3.8735	3.8733	-0.005%	N/C	
						YES
	Y-833 D1	4.0774	4.0788	0.034%	N/C	
						YES
	923 E1	4.6507	4.6579	0.155%	N/C	
						NO
	ISO-800 F1	4.1343	4.1386	0.104%	N/C	
						NO
HFC-134/2927 Iso-32 @ 260°F -> 24 HRS @ 302F						
U-475 A2	3.9143	3.9093	-0.128%	N/C		
					YES	
Y-390 B2	3.9349	3.9347	-0.005%	N/C		
					NO	
ER-610 C2	3.8615	3.8606	-0.023%	N/C		
					Yes	
Y-833 D2	3.9393	3.9379	-0.036%	N/C		
					YES	
923 E2	4.7107	4.7105	-0.004%	N/C		
					NO	
ISO-800 F2	4.1593	4.1692	0.238%	N/C		
					NO	

		500 HRS in HFC-134/2927 Iso-32 @ 260°F					
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX	
POLYESTER POLYAMIDE	U-475 A1	3.7134	3.7154	0.054%	N/C	YES	
	Y-390 B1	3.5370	3.5453	0.235%	N/C	NO	
	ER-610 C1	4.1436	4.1498	0.150%	N/C	NO	
	Y-833 D1	4.2564	4.2605	0.096%	N/C	NO	
	923 E1	4.0415	4.0482	0.166%	N/C	NO	
	ISO-800 F1	3.7869	3.7932	0.166%	N/C	NO	
MIDEX POLYGLASS		HFC-134/2927 500 hr exp. plus 24 hrs. @ 302°F					
	U-475 A2	3.7121	3.7080	-0.110%	N/C	YES	
	Y-390 B2	4.2120	4.2132	0.028%	N/C	NO	
	ER-610 C2	3.6081	3.6057	-0.067%	N/C	YES	
	Y-833 D2	4.2823	4.2807	-0.037%	N/C	NO	
	923 E2	3.6998	3.6993	-0.014%	N/C	NO	
	ISO-800 F2	4.5576	4.5585	0.020%	N/C	NO	

SINGLE/WIRE C/WITH VARNISH--HFC-134/Emery 2927 Iso-32 oil 260°F(127°C)

500 HRS in HFC-134/Emery 2927 Iso-32 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIMIDE	U-475 A1	4.3579	4.3625	0.106%	N/C	NO
	Y-390 B1	4.0022	4.0090	0.170%	N/C	NO
	ER-610 C1	4.2479	4.2493	0.033%	N/C	YES
	Y-833 D1	4.1438	4.1451	0.031%	N/C	YES
	923 E1	4.3491	4.3554	0.145%	N/C	NO
	ISO-800 F1	4.2884	4.2926	0.098%	N/C	NO
	HFC-134/2927 Iso-32 -> 24 HRS @ 302°F					
	U-475 A2	4.3780	4.3732	-0.110%	N/C	YES
	Y-390 B2	4.1959	4.1961	0.005%	N/C	NO
	ER-610 C2	4.3542	4.3529	-0.030%	N/C	YES
	Y-833 D2	4.1804	4.1792	-0.029%	N/C	YES
	923 E2	4.5563	4.5565	0.004%	N/C	NO
	ISO-800 F2	4.3882	4.3885	0.007%	N/C	NO

Varnish Disks----HFC-134/Emery 2927 Iso-32 Oil

500 HRS IN R-134/Emery 2927 Iso -32@ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.9688	2.9704	0.05%	Surface	N/C
				Cloudy	
Y-390 B1	2.1557	2.1116	2.05%	Slightly warped lightened	N/C
ER-610 C1	2.5972	2.6685	2.75%	Slightly Darkened	N/C
Y-833 D1	3.9723	4.0394	1.69%	Light green in color	N/C
923 E1	2.5062	2.4724	-1.35%	Lightened Warped	N/C
ISO-800 F1	2.2163	2.1957	-0.93%	Slightly warped lighter in	N/C color
R-134/Emery 2927 at --->24 hour at 302°F.					
U-475 A2	2.4905	2.4055	-3.41%	Surface Cloudy Darkened	N/C
Y-390 B2	2.0581	2.0051	-2.58%	Slightly warped Darkened	N/C
ER-610 C2	2.8314	2.8199	-0.41%	Darkened	N/C
Y-833 D2	3.3365	3.3227	-0.41%	N/C	N/C
923 E2	2.2994	2.2283	-3.09%	Warped	
					N/C
ISO-800 F2	2.2531	2.1796	-3.26%	slightly warped	N/C

SHEET INSULATION-HFC-134/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-134/Emery 2927 Iso-32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	%CHANGE TENSILE
NO/MY/NO A1	7.6901	8.3478	8.55%	0.430	150.10	21	17.4	16.62	
				0.457	159.40	21	17.4	16.61	-3.66%
				0.462	165.50	21	17.4	17.06	
DA/MY/DA B1	7.4090	7.5004	1.23%	0.372	109.70	21	13.7	14.04	
				0.410	124.80	21	13.7	14.49	4.31%
				0.380	114.40	21	13.7	14.34	
MYLAR MO C1	3.9631	4.0206	1.45%	0.460	94.90	10	21.7	20.63	
				0.494	93.90	10	21.7	19.01	-11.17%
				0.403	73.30	10	21.7	18.19	
NO 410 D1	3.4816	3.9993	14.87%	0.511	98.00	10	18.7	19.18	
				0.437	80.90	10	18.7	18.51	-0.44%
				0.495	89.90	10	18.7	18.16	
NO MI 418 E1	3.9442	5.2101	32.10%	0.501	37.15	10	7.5	7.42	
				0.489	34.70	10	7.5	7.10	-1.94%
				0.486	36.70	10	7.5	7.55	
MEL 228 F1	4.2508	4.3221	1.68%	0.396	75.15	10	21.7	18.98	
				0.508	93.75	10	21.7	18.45	-13.65%
				0.460	86.40	10	21.7	18.78	
500 HRS in HFC-134/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	7.4454	7.6985	3.40%	0.420	148.80	21	17.4	16.87	
				0.500	174.80	21	17.4	16.65	-3.98%
				0.343	119.60	21	17.4	16.60	
DA/MY/DA B2	7.6135	7.5755	-0.50%	0.365	107.40	21	13.7	14.01	
				0.365	102.60	21	13.7	13.39	-1.17%
				0.380	105.50	21	13.7	13.22	
MYLAR MO C2	3.7889	3.9858	5.20%	0.426	77.75	10	21.7	18.25	
				0.425	77.10	10	21.7	18.14	-16.64%
				0.440	78.65	10	21.7	17.88	
NOMEX 410 D2	3.7257	4.0421	8.49%	0.450	88.65	10	18.7	19.70	
				0.478	86.80	10	18.7	18.16	2.04%
				0.490	95.00	10	18.7	19.39	
NO/MI 418 E2	4.6669	5.7738	23.72%	0.492	31.20	10	7.5	6.34	
				0.508	33.60	10	7.5	6.61	-12.74%
				0.480	32.05	10	7.5	6.68	
MEL 228 F2	4.3370	4.3502	0.30%	0.513	83.35	10	21.7	16.25	
				0.461	77.15	10	21.7	16.74	-24.17%
				0.435	71.25	10	21.7	16.38	

SHEET INSULATION-HFC-134/Emery 2927 Iso-32 oil @ 260° F(127° C)

500 HRS in HFC-134/Emery 2927 Iso-32 @ 260 F								
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	VISUAL EXP
NO/MY/NO A1	0.55	13.8%	20.0%		>18.97	flash		N/C
	0.63	15.8%	20.0%	-26.3%	>18.97	flash	flash	
	0.63	15.8%	20.0%		>18.97	flash		
DA/MY/DA B1	0.57	28.5%	46.0%		>15.27	flash		Yellowed slightly warped
	0.57	28.5%	46.0%	-39.1%	>15.27	flash	flash	
	0.54	27.0%	46.0%		>15.27	flash		
MYLAR MO C1	2.69	134.5%	131.0%		>14.91	flash		N/C
	2.74	137.0%	131.0%	-3.1%	>14.91	flash	flash	
	2.19	109.5%	131.0%		>14.91	flash		
NO 410 D1	0.37	18.5%	17.0%		10.67	12.89		N/C
	0.30	7.5%	17.0%	-34.3%	10.67	flash	20.8%	
	0.30	7.5%	17.0%		10.67	flash		
NO MI 418 E1	0.05	1.3%	4.0%		10.23	flash		N/C
	0.04	1.0%	4.0%	-72.9%	10.23	flash	FLASH	
	0.04	1.0%	4.0%		10.23	flash		
MEL 228 F1	3.32	166.0%	160.0%		>14.22	flash		slightly yellowed
	2.89	144.5%	160.0%	-4.2%	>14.22	flash	flash	
	2.99	149.5%	160.0%		>14.22	flash		
500 HRS in HFC-134/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F								
NO/MY/NO A2	0.58	14.5%	20.0%		>18.97	flash		Delamination big pockets
	0.52	13.0%	20.0%	-35.4%	>18.97	flash	flash	
	0.45	11.3%	20.0%		>18.97	flash		
DA/MY/DA B2	0.54	27.0%	46.0%		>15.27	flash		Yellowed slightly warped
	0.52	26.0%	46.0%	-43.8%	>15.27	flash	flash	
	0.49	24.5%	46.0%		>15.27	flash		
MYLAR MO C2	2.81	140.5%	131.0%		>14.91	flash		N/C
	2.70	135.0%	131.0%	4.3%	>14.91	flash	flash	
	2.69	134.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.41	10.3%	17.0%		10.67	11.20		N/C
	0.31	7.8%	17.0%	-46.1%	10.67	11.45	7.7%	
	0.38	9.5%	17.0%		10.67	11.84		
NO/MI 418 E2	0.04	1.0%	4.0%		10.23	12.50		N/C
	0.04	1.0%	4.0%	-75.0%	10.23	11.79	17.2%	
	0.04	1.0%	4.0%		10.23	11.67		
MEL 228 F2	3.30	165.0%	160.0%		>14.22	flash		slightly yellowed
	3.42	171.0%	160.0%	2.2%	>14.22	flash	flash	
	3.09	154.5%	160.0%		>14.22	flash		

TIE CORD--HFC-134/Emery 2927 ISO-32 oil @ 260°F(127°C)

500 HRS IN R-134/2927 Iso-32 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2852	0.2875	0.81%	N/C	28.36	37.42		0.46	23.0%
					28.36	34.97	26.46%	0.41	20.5%
					28.36	35.20		0.42	21.0%
500 HRS IN R-134/Emery 2927 -> 24 HRS @ 302°F									
A2	0.2731	0.2727	-0.146%	N/C	28.36	36.20		0.46	23.0%
					28.36	30.50	14.97%	0.48	24.0%
					28.36	31.12		0.43	21.5%

LEAD WIRE INSULATION-HFC-134/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS IN HFC-134/Emery 2927 Iso-32 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD A1	4.1489	4.3403	4.61%	N/C	9.61	8.50	
					9.61	7.00	-20.22%
					9.61	7.50	
DTMD B1	4.5354	4.7338	4.37%	N/C	9.95	12.00	
					9.95	12.23	27.00%
					9.95	13.68	
HFC-134/Emery 2927 Iso-32 @ 260°F -> 24 HRS @ 302°F							
DMD A2	4.2144	4.3762	3.84%	N/C	9.61	7.43	
					9.61	9.99	-14.98%
					9.61	7.09	
DTMD B2	4.2914	4.3821	2.11%	N/C	9.95	11.79	
					9.95	flash	22.51%
					9.95	12.59	

Appendix L

**Experimental Data for HFC-245ca/Henkel-
Emery 2927 ISO-32 Exposure at
126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-245ca and ISO 32 @ 250°F(121°C)

500 HRS IN R-245ca and ISO 32 @ 250°F(121°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	EXP DIE	EXP DIE	DIE % CHANGE
A1	22.9986	23.0050	0.028%	N/C	576	578		15.80	13.49	
					576	503	-9.5%	15.80	14.04	-11.8%
					576	483		15.80	14.26	
B1	22.2954	22.3486	0.239%	N/C	736	733		11.60	11.63	
					736	729	-4.2%	11.60	12.55	3.8%
					736	653		11.60	11.93	
C1	23.7815	23.7855	0.017%	N/C	579	490		16.40	11.70	
					579	539	-7.6%	16.40	12.49	-23.4%
					579	576		16.40	13.50	
500 hr in R-245ca and ISO 32 plus 24 hr at 302F										
A2	22.6116	22.6125	0.004%	N/C	576	577		15.80	9.87	
					576	560	-1.3%	15.80	16.29	-18.2%
					576	569		15.80	12.63	
B2	23.1963	23.2014	0.022%	N/C	736	644		11.60	11.67	
					736	727	-4.9%	11.60	10.76	-5.6%
					736	728		11.60	10.43	
C2	23.6962	23.6811	-0.064%	N/C	579	502		16.60	14.34	
					579	581	-4.7%	16.60	15.33	-15.8%
					579	573		16.60	12.27	

TWISTED PAIRS/WIRE A/WITH VARNISH---HFC-245ca and ISO 32

JRS IN R-245ca and ISO 32 @ 250°F(121°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MID EMI	U-475 A1	23.6361	23.6652	0.123%	N/C	16.24	16.33		430	546	
						16.24	17.61	9.69%	430	515	29.46%
						16.24	19.50		430	609	
	Y-390 B1	23.4584	23.5022	0.187%	N/C	18.77	16.24		510	468	
						18.77	19.82	-4.30%	510	416	-14.44%
						18.77	17.83		510	425	
	ER-610 C1	22.0491	22.0627	0.062%	N/C	15.57	11.59		442	442	
						15.57	14.48	-14.64%	442	395	-8.82%
						15.57	13.80		442	372	
	Y-833 D1	23.3472	23.3378	-0.040%	N/C	12.04	11.47		578	472	
						12.04	11.21	2.63%	578	524	-18.63%
						12.04	14.39		578	415	
	923 E1	28.2906	28.3320	0.146%	N/C	16.76	19.77		606	426	
						16.76	16.60	9.37%	606	427	-26.68%
						16.76	18.62		606	480	
	ISO-800 F1	23.8512	23.8825	0.131%	N/C	19.08	14.59		580	579	
					.	19.08	17.54	-9.63%	580	582	0.86%
						19.08	19.60		580	594	
R245ca and ISO 32-24 HOURS AT 302 F											
U-475 A2	24.1227	24.1176	-0.021%	N/C	16.24	19.34		430	610		
					16.24	17.53	7.06%	430	546	35.97%	
					16.24	15.29		430	598		
Y-390 B2	24.0043	24.0147	0.043%	N/C	18.77	19.80		510	543		
					18.77	19.99	6.16%	510	383	-11.24%	
					18.77	19.99		510	432		
ER-610 C2	22.9111	22.9147	0.016%	N/C	15.57	12.81		442	341		
					15.57	12.50	-21.19%	442	415	-14.78%	
					15.57	11.50		442	374		
Y-833 D2	23.4979	23.4773	-0.088%	N/C	12.04	12.49		578	650		
					12.04	10.54	-5.43%	578	496	-1.85%	
					12.04	11.13		578	556		
923 E2	23.7201	23.7366	0.070%	N/C	16.76	19.83		606	427		
					16.76	19.94	6.60%	606	454	-25.25%	
					16.76	13.83		606	478		
ISO-800 F2	23.7844	23.7915	0.030%	N/C	19.08	11.64		580	598		
					19.08	16.62	-25.05%	580	576	0.06%	
					19.08	14.64		580	567		

TWISTED PAIRS/WIRE C/WITH VARNISH---HFC-245ca and ISO 32

JRS IN R-245ca and ISO 32 @ 250°F(121°C)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE	U-475 A1	24.4353	24.4649	0.121%	N/C	15.10	18.90		469	585	
						15.10	19.41	27.26%	469	553	24.31%
						15.10	19.34		469	611	
Y-390 B1	23.1067	23.1395	0.142%	N/C	18.24	19.94		473	569		
					18.24	19.98	9.32%	473	585	22.97%	
					18.24	19.90		473	591		
ER-610 C1	25.6318	25.6465	0.057%	N/C	14.53	15.61		494	337		
					14.53	17.74	5.16%	494	352	-28.48%	
					14.53	12.49		494	371		
Y-833 D1	21.7789	21.7726	-0.029%	N/C	11.38	16.16		557	475		
					11.38	16.57	37.11%	557	478	-13.23%	
					11.38	14.08		557	497		
923 E1	23.8526	23.8852	0.137%	N/C	15.85	17.93		503	495		
					15.85	13.18	7.32%	503	539	11.60%	
					15.85	19.92		503	650		
ISO-800 F1	23.2874	23.3173	0.128%	N/C	14.75	18.10		632	580		
					14.75	15.83	16.52%	632	594	-4.69%	
					14.75	17.63		632	633		
R-245ca and ISO 32 --> 24 hours @ 302 F											
U-475 A2	24.7625	24.7518	-0.043%	N/C	15.10	19.37		469	645		
					15.10	13.52	13.91%	469	600	28.36%	
					15.10	18.71		469	561		
Y-390 B2	24.0038	24.0151	0.047%	N/C	18.24	16.93		473	553		
					18.24	19.77	-2.49%	473	548	8.74%	
					18.24	15.80		473	442		
ER-610 C2	21.3030	21.3036	0.003%	N/C	14.53	12.73		494	375		
					14.53	8.24	-20.83%	494	385	-23.14%	
					14.53	13.54		494	379		
Y-833 D2	23.1073	23.0949	-0.054%	N/C	11.38	10.39		557	555		
					11.38	10.07	-1.99%	557	503	-4.13%	
					11.38	13.00		557	544		
923 E2	24.4082	24.4205	0.050%	N/C	15.85	16.31		503	646		
					15.85	18.29	3.13%	503	550	17.43%	
					15.85	14.44		503	576		
ISO-800 F2	23.4258	23.4330	0.031%	N/C	14.75	12.34		632	573		
					14.75	18.86	12.56%	632	590	-11.08%	
					14.75	18.61		632	523		

HELICAL COILS/WIRE A---HFC-245ca/Emery 2927 Iso-32 @260°F(127°C)

500 HRS in HFC-245ca/2927 Iso-32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE	U-475 A1	38.2276	38.2586	0.081%	N/C	73.73	47.37	-21.45%
						73.73	52.00	
						73.73	74.37	
	Y-390 B1	38.9996	39.0238	0.062%	N/C	43.78	31.25	-29.79%
						43.78	33.80	
						43.78	27.17	
	ER-610 C1	38.8697	38.8989	0.075%	N/C	51.81	63.85	6.74%
						51.81	48.35	
						51.81	53.70	
	Y-833 D1	38.9208	38.8727	-0.124%	N/C	9.85	14.87	102.50%
						9.85	23.67	
						9.85	21.30	
	923 E1	38.9798	38.9938	0.036%	N/C	41.28	28.47	-20.73%
						41.28	34.30	
						41.28	35.40	
	ISO-800 F1	38.4800	38.5001	0.052%	N/C	45.01	34.90	-21.80%
						45.01	35.50	
						45.01	37.62	
500 HRS in HFC-245ca/2927 Iso-32 @ 260 F -> 24 HRS 302°F								
U-475 A2	38.5043	38.5140	0.025%	N/C	73.73	67.27	3.63%	
					73.73	76.66		
					73.73	76.15		
Y-390 B2	38.1401	38.1545	0.038%	N/C	43.78	44.15	9.73%	
					43.78	42.05		
					43.78	57.92		
ER-610 C2	36.8086	36.8175	0.024%	N/C	51.81	51.72	2.77%	
					51.81	53.12		
					51.81	54.90		
Y-833 D2	37.1936	36.9296	-0.710%	N/C	9.85	13.95	82.13%	
					9.85	27.22		
					9.85	12.65		
923 E2	39.8052	39.8091	0.010%	N/C	41.28	31.10	-16.37%	
					41.28	37.70		
					41.28	34.77		
ISO-800 F2	37.9994	38.0012	0.005%	N/C	45.01	45.55	5.27%	
					45.01	50.72		
					45.01	45.87		

HELICAL COILS/WIRE B-HFC-245ca/Emery 2927 Iso-32 Oil @ 260°F(127°C)

	500 HRS in HFC-245ca/Emery 2927 Iso-32 @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE EPOXY GLASS	U-475 A1	36.4932	36.5418	0.133%	N/C	40.14	35.12	-21.66%
						40.14	24.00	
						40.14	35.22	
	Y-390 B1	36.4548	36.4820	0.075%	N/C	36.12	42.85	-14.21%
						36.12	14.71	
						36.12	35.40	
	ER-610 C1	36.5700	36.6194	0.135%	N/C	35.96	26.37	-18.99%
						35.96	28.15	
						35.96	32.87	
	Y-833 D1	35.6704	35.6424	-0.078%	N/C	33.14	30.57	-11.93%
						33.14	39.52	
						33.14	17.47	
	923 E1	36.9361	36.9563	0.055%	N/C	40.52	37.25	-3.32%
						40.52	35.70	
						40.52	44.57	
	ISO-800 F1	36.9529	36.9702	0.047%	N/C	20.20	21.32	6.58%
						20.20	21.80	
						20.20	21.47	
	500 HRS in HFC-245ca/Emery 2927 Iso-32 @ 260 F -> 24 HRS 302°F							
IMIDE EPOXY GLASS	U-475 A2	36.2507	36.2710	0.056%	N/C	40.14	32.45	-18.67%
						40.14	26.22	
						40.14	39.27	
	Y-390 B2	37.3548	37.3614	0.018%	N/C	36.12	32.85	6.90%
						36.12	40.97	
						36.12	42.02	
	ER-610 C2	37.2386	37.2545	0.043%	N/C	35.96	31.52	-17.09%
						35.96	30.90	
						35.96	27.02	
	Y-833 D2	35.2189	34.9913	-0.646%	N/C	33.14	40.17	-8.80%
						33.14	20.25	
						33.14	30.25	
	923 E2	37.2381	37.2483	0.027%	N/C	40.52	36.42	-9.58%
						40.52	39.20	
						40.52	34.30	
	ISO-800 F2	36.6815	36.6965	0.041%	N/C	20.20	18.80	-7.39%
						20.20	19.87	
						20.20	17.45	

HELICAL COILS/WIRE C-HFC- R245ca/Emery 2927 Iso-32@ 260°F(127°C)

500 HRS in HFC-245ca/Emery 2927 @ 260 F									
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE	
POLYESTERIMIDE POLYAMIDE	U-475 A1	42.0674	42.1125	0.107%	N/C	51.21	52.77	2.95%	
						51.21	51.42		
						51.21	53.97		
	Y-390 B1	40.3415	40.3656	0.060%	N/C	50.72	45.95	-34.56%	
						50.72	26.60		
						50.72	27.02		
	ER-610 C1	38.6515	38.7005	0.127%	N/C	58.33	57.97	-11.10%	
						58.33	50.20		
						58.33	47.40		
	Y-833 D1	38.5670	38.4861	-0.210%	N/C	5.84	22.47	274.09%	
						5.84	22.25		
						5.84	20.82		
	923 E1	38.4840	38.5033	0.050%	N/C	49.26	27.15	-49.81%	
						49.26	23.10		
						49.26	23.92		
	ISO-800 F1	39.6351	39.5900	-0.114%	N/C	36.08	22.70	-38.39%	
						36.08	19.97		
						36.08	24.02		
	500 HRS in HFC-245ca/2927 Iso-32 @ 260 F-> 24 HRS 302°F								
	U-475 A2	40.2249	40.2395	0.036%	N/C	51.21	63.12	14.68%	
						51.21	60.62		
						51.21	52.45		
	Y-390 B2	40.2627	40.2694	0.017%	N/C	50.72	50.27	-4.94%	
						50.72	45.45		
					50.72	48.92			
ER-610 C2	37.1413	37.1562	0.040%	N/C	58.33	26.90	1.69%		
					58.33	79.65			
					58.33	71.40			
Y-833 D2	37.6643	37.5740	-0.240%	N/C	5.84	34.17	442.47%		
					5.84	26.82			
					5.84	34.05			
923 E2	39.3709	39.3742	0.008%	N/C	49.26	39.65	-25.36%		
					49.26	38.35			
					49.26	32.30			
ISO-800 F2	38.0345	37.9402	-0.248%	N/C	36.08	28.85	-26.09%		
					36.08	25.40			
					36.08	25.75			

SINGLE MAG WIRE IN 245ca and ISO 32 @250°F(121°C)

	500 HRS IN R-245 @ 250°F(121°C)				
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.3419	3.3433	0.042%	N/C	
					YES
B1	3.7053	3.7106	0.143%	N/C	
					YES
C1	3.38	3.3811	0.033%	N/C	
					YES
R-245 -> 302°F for 24 HRS					
A2	3.6396	3.6393	-0.008%	N/C	
					YES
B2	3.7723	3.7717	-0.016%	N/C	
					YES
C2	3.2839	3.2835	-0.012%	N/C	
					YES

SINGLE/WIRE A/WITH VARNISH---HFC-245 and ISO 32

RS IN R-245ca and ISO 32 @250°F(121°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE	U-475 A1	4.2336	4.2334	-0.005%	N/C	NO
	Y-390 B1	4.1820	4.1876	0.134%	N/C	NO
	ER-610 C1	4.0728	4.0740	0.029%	N/C	YES
	Y-833 D1	3.6677	3.6678	0.003%	N/C	YES
	923 E1	4.5101	4.5164	0.140%	N/C	NO
	ISO-800 F1	4.2810	4.2853	0.100%	N/C	NO
	R-245ca and ISO 32-> 302°F					
	U-475 A2	4.1873	4.1812	-0.146%	N/C	YES
	Y-390 B2	4.2790	4.2802	0.028%	N/C	NO
	ER-610 C2	3.6061	3.6044	-0.047%	N/C	YES
	Y-833 D2	3.8635	3.8602	-0.085%	N/C	YES
	923 E2	4.6484	4.6498	0.030%	N/C	NO
	ISO-800 F2	3.9371	3.9378	0.018%	N/C	NO

SINGLE/WIRE B/WITH VARNISH--HFC-245ca and ISO 32

R-245 and ISO 32 @ 250° F(121°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER	U-475 A1	4.2869	4.2889	0.047%	N/C	
						NO
	Y-390 B1	4.5086	4.5173	0.193%	N/C	
						NO
	ER-610 C1	4.3170	4.3192	0.051%	N/C	
						YES
	Y-833 D1	4.1868	4.1907	0.093%	N/C	
						NO
923 E1	4.0391	4.0455	0.158%	N/C		
					NO	
ISO-800 F1	4.3644	4.3713	0.158%	N/C		
					NO	
R-245ca and ISO 32 -> 24 HRS @ 302F						
U-475 A2	3.9308	3.9258	-0.127%	N/C		
					NO	
Y-390 B2	3.9872	3.9883	0.028%	N/C		
					NO	
ER-610 C2	4.2168	4.2139	-0.069%	N/C		
					YES	
Y-833 D2	4.2881	4.2850	-0.072%	N/C		
					YES	
923 E2	3.9642	3.9646	0.010%	N/C		
					NO	
ISO-800 F2	4.3998	4.3909	-0.202%	N/C		
					NO	

SINGLE/WIRE C/WITH VARNISH---HFC-245ca and ISO 32

R-245ca and ISO 32 at 250°F(121°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTERIMIDE	U-475 A1	4.3257	4.3294	0.086%	N/C	
						YES
	Y-390 B1	4.0673	4.0725	0.128%	N/C	
						NO
	ER-610 C1	3.7524	3.7546	0.059%	N/C	
						NO
	Y-833 D1	4.2317	4.2322	0.012%	N/C	
						YES
	923 E1	4.1623	4.1683	0.144%	N/C	
						NO
	ISO-800 F1	4.3890	4.3929	0.089%	N/C	
						NO
R-245ca and ISO 32 -> 24 HRS @ 302F						
U-475 A2	4.2475	4.2433	-0.099%	N/C		
					NO	
Y-390 B2	3.9958	3.9971	0.033%	N/C		
					NO	
ER-610 C2	3.7418	3.7406	-0.032%	N/C		
					NO	
Y-833 D2	4.1139	4.1131	-0.019%	N/C		
					YES	
923 E2	4.1526	4.1538	0.029%	N/C		
					NO	
ISO-800 F2	4.3319	4.3331	0.028%	N/C		
					NO	

Varnish Disks----HFC-245ca and ISO 32 at 250°F(121°C)

500 HRS IN R-245ca and ISO 32 @ 250° F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.5497	2.5811	1.23%	N/C	N/C
Y-390 B1	1.6522	1.6512	0.06%	N/C	N/C
ER-610 C1	2.2099	2.2945	3.83%	slightly darkened	N/C
Y-833 D1	3.0108	3.0927	2.72%	N/C	N/C
923 E1	2.0002	1.9829	-0.86%	slightly warped	N/C
ISO-800 F1	1.7624	1.7378	-1.40%	slightly warped	N/C
R-245ca and ISO 32 ---->24 hour at 302°F.					
U-475 A2	1.9538	1.9241	-1.52%	Darkened	N/C
Y-390 B2	2.5435	2.5250	-0.73%	darkened	N/C
ER-610 C2	2.4959	2.5122	0.65%	darkened	N/C
Y-833 D2	2.8166	2.8232	0.23%	N/C	N/C
923 E2	2.3465	2.3060	-1.73%	darkened warped	N/C
ISO-800 F2	2.5050	2.4171	-3.51%	slightly warped Darkened	N/C

SHEET INSULATION-HFC-R245ca/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-R245ca/Emery 2927 Iso-32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	5.4252	5.8305	7.47%	0.434	155.00	21	17.4	17.01	
				0.330	108.20	21	17.4	15.61	-6.90%
				0.352	118.10	21	17.4	15.98	
DA/MY/DA B1	4.8436	5.0502	4.27%	0.440	119.70	21	13.7	12.95	
				0.378	101.90	21	13.7	12.84	-5.23%
				0.372	102.80	21	13.7	13.16	
MYLAR MO C1	2.2254	2.2472	0.98%	0.478	78.00	9	21.7	18.13	
				0.444	72.80	9	21.7	18.22	-15.87%
				0.419	69.45	9	21.7	18.42	
NO 410 D1	2.2982	2.6125	13.68%	0.589	113.60	10	18.7	19.29	
				0.605	102.90	10	18.7	17.01	-5.37%
				0.592	99.40	10	18.7	16.79	
NO MI 418 E1	2.1719	2.9448	35.59%	0.555	25.45	9	7.5	5.10	
				0.598	35.75	9	7.5	6.64	-13.30%
				0.459	32.10	9	7.5	7.77	
MEL 228 F1	2.6116	2.6437	1.23%	0.434	31.50	10	21.7	7.26	
				0.474	82.75	10	21.7	17.46	-35.05%
				0.394	69.20	10	21.7	17.56	
500 HRS in HFC-R245ca/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	5.3134	5.5822	5.06%	0.432	156.30	21	17.4	17.23	
				0.500	176.40	21	17.4	16.80	-2.97%
				0.457	159.50	21	17.4	16.62	
DA/MY/DA B2	4.9612	5.0549	1.89%	0.426	102.30	21	13.7	11.44	
				0.377	107.80	21	13.7	13.62	-4.84%
				0.316	93.30	21	13.7	14.06	
MYLAR MO C2	2.1957	2.1981	0.11%	0.452	73.65	10	21.7	16.29	
				0.392	61.70	10	21.7	15.74	-26.23%
				0.425	67.95	10	21.7	15.99	
NOMEX 410 D2	2.2940	2.4972	8.86%	0.517	73.65	10	18.7	14.25	
				0.432	72.55	10	18.7	16.79	-11.03%
				0.434	81.90	10	18.7	18.87	
NO/MI 418 E2	2.0833	2.6642	27.88%	0.493	33.85	9	7.5	7.63	
				0.576	35.50	9	7.5	6.85	-5.37%
				0.481	29.50	9	7.5	6.81	
MEL 228 F2	2.6879	2.6992	0.42%	0.504	85.00	9	21.7	18.74	
				0.431	72.90	9	21.7	18.79	-12.68%
				0.401	69.70	9	21.7	19.31	

SHEET INSULATION-HFC-R245ca/Emery 2927 Iso-32 oil @ 260°F(127°C)

500 HRS in HFC-R245ca/Emery 2927 Iso-32 @ 260 F								
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	VISUAL EXP
NO/MY/NO A1	0.54	13.5%	20.0%		>18.97	flash		N/C
	0.26	6.5%	20.0%	-50.0%	>18.97	flash	flash	
	0.35	8.8%	20.0%		>18.97	flash		
DA/MY/DA B1	0.42	21.0%	46.0%		>15.27	flash		slightly yellowed warped
	0.40	20.0%	46.0%	-54.3%	>15.27	flash	flash	
	0.44	22.0%	46.0%		>15.27	flash		
MYLAR MO C1	1.13	56.5%	131.0%		>14.91	flash		N/C
	1.77	88.5%	131.0%	-42.0%	>14.91	flash	flash	
	1.66	83.0%	131.0%		>14.91	flash		
NO 410 D1	0.35	17.5%	17.0%		10.67	flash		N/C
	0.22	5.5%	17.0%	-44.6%	10.67	flash	flash	
	0.21	5.3%	17.0%		10.67	flash		
NO MI 418 E1	0.03	0.8%	4.0%		10.23	flash		N/C
	0.04	1.0%	4.0%	-79.2%	10.23	flash	flash	
	0.03	0.8%	4.0%		10.23	flash		
MEL 228 F1	0.99	49.5%	160.0%		>14.22	flash		N/C
	1.54	77.0%	160.0%	-63.9%	>14.22	flash	flash	
	0.94	47.0%	160.0%		>14.22	flash		
500 HRS in HFC-R245ca/Emery 2927 Iso 32 @ 260 F ->24 HRS @ 302°F								
NO/MY/NO A2	0.53	13.3%	20.0%		>18.97	flash		N/C
	0.54	13.5%	20.0%	-39.4%	>18.97	flash	flash	
	0.43	10.8%	20.0%		>18.97	flash		
DA/MY/DA B2	0.47	23.5%	46.0%		>15.27	flash		slightly darkened
	0.47	23.5%	46.0%	-49.3%	>15.27	flash	flash	
	0.46	23.0%	46.0%		>15.27	flash		
MYLAR MO C2	1.09	54.5%	131.0%		>14.91	flash		N/C
	1.31	65.5%	131.0%	-47.5%	>14.91	flash	flash	
	1.73	86.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.16	4.0%	17.0%		10.67	11.65		N/C
	0.25	6.3%	17.0%	-62.7%	10.67	11.25	7.0%	
	0.35	8.8%	17.0%		10.67	11.36		
NO/MI 418 E2	0.05	1.3%	4.0%		10.23	flash		N/C
	0.04	1.0%	4.0%	-72.9%	10.23	flash	flash	
	0.04	1.0%	4.0%		10.23	flash		
MEL 228 F2	1.29	64.5%	160.0%		>14.22	flash		N/C
	2.53	126.5%	160.0%	-49.2%	>14.22	flash	flash	
	1.06	53.0%	160.0%		>14.22	flash		

SLEEVEING--HFC-R245ca/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS in HFC-R245ca/Emery 2927 Iso-32 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5595	0.6419	14.73%	N/C
B1 MYLAR	0.5164	0.5287	2.38%	N/C
C1 NO/MY	0.3983	0.4204	5.55%	N/C
HFC-R245ca/Emery Iso 32 oil @ 260°F plus 24 hrs @ 302°F				
A2 NOMEX	0.5303	0.5800	9.37%	N/C
B2 MYLAR	0.3972	0.3912	-1.51%	N/C
C2 NO/MY	0.4531	0.4090	-9.73%	N/C

500 HRS in HFC-245ca/Emery 2927 Iso32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.8444	1.8549	0.57%	39.02	60.72		0.05	2.50%	N/C
				39.02	78.17	73.77%	0.07	3.50%	
				39.02	64.52		0.07	3.50%	
B1 Polyester	0.6923	0.7539	8.90%	56.12	59.95		0.61	30.50%	N/C
				56.12	55.05	1.81%	0.64	32.00%	
				56.12	56.40		1.16	58.00%	
C1 Permacel	1.6023	2.1784	35.95%	88.50	102.30		0.17	8.50%	Slightly
				88.50	103.90	14.99%	0.16	8.00%	curled up
				88.50	99.10		0.17	8.50%	
500 HRS in HFC-R245ca/Emery 2927 ISO32 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.4282	1.4745	3.24%	39.02	51.07		0.04	2.00%	N/C
				39.02	48.17	26.57%	0.08	4.00%	
				39.02	48.92		0.07	3.50%	
B2 Polyester	0.7453	0.7331	-1.64%	56.12	54.85		0.71	35.50%	N/C
				56.12	53.27	-3.40%	0.48	24.00%	
				56.12	54.52		0.50	25.00%	
C2 Permacel	1.3903	1.6978	22.12%	88.50	88.30		0.14	7.00%	N/C
				88.50	84.20	-2.69%	0.15	7.50%	
				88.50	85.85		0.15	7.50%	

TIE CORD--HFC-245ca/Emery 2927 ISO-32 oil @ 260°F(127°C)

500 HRS IN R-245ca/2927 Iso-32 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2907	0.2933	0.89%	N/C	28.36	29.52		0.34	17.0%
					28.36	31.75	7.71%	0.34	17.0%
					28.36	30.37		0.32	16.0%
500 HRS IN R-245ca/Emery 2927 -> 24 HRS @ 302°F									
A2	0.3252	0.3258	0.185%	N/C	28.36	27.32		0.44	22.0%
					28.36	31.87	15.82%	0.45	22.5%
					28.36	39.35		0.49	24.5%

LEAD WIRE INSULATION-HFC-R245ca/Emery 2927 Iso-32 @ 260°F(127°C)

500 HRS IN HFC-R245ca/Emery 2927 Iso-32 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.5707	4.9023	7.25%	N/C	9.61	7.85	
A1					9.61	8.27	-12.87%
					9.61	9.00	
DTMD	4.3770	4.6532	6.31%	N/C	9.95	13.26	
B1					9.95	13.50	42.38%
					9.95	15.74	
HFC-R245ca/Emery 2927 Iso-32 @ 260°F -> 24 HRS @ 302°F							
DMD	4.5755	4.7765	4.39%	N/C	9.61	9.94	
B2					9.61	10.00	-6.59%
					9.61	6.99	
DTMD	4.3588	4.4983	3.20%	N/C	9.95	12.61	
B2					9.95	11.90	25.73%
					9.95	13.02	

Appendix M

**Experimental Data for HFC-134a/ICI
Emkarox VG32 Exposure at 126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-134a/ICI Emkarox VG32 oil @260°F(127°C)

500 hours in HFC-134a/ICI Emkarox VG32 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	23.2957	23.3087	0.056%	N/C	576	579		15.80	17.61	
					576	521	-4.1%	15.80	17.83	3.2%
					576	557		15.80	13.49	
B1	23.4946	23.5413	0.199%	N/C	736	732		11.62	11.24	
					736	731	-0.6%	11.62	12.29	5.6%
					736	732		11.62	13.28	
C1	20.6632	20.6721	0.043%	N/C	579	556		16.58	16.21	
					579	584	-7.6%	16.58	15.02	-8.4%
					579	465		16.58	14.35	
500 hours in HFC-134a/ICI Emkarox VG32 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	23.8079	23.8098	0.008%	N/C	576	455		15.80	14.80	
					576	455	-21.4%	15.80	10.32	-16.6%
					576	448		15.80	14.43	
B2	22.977	22.9822	0.023%	N/C	736	717		11.62	11.53	
					736	731	-3.4%	11.62	12.06	1.3%
					736	684		11.62	11.74	
C2	21.4172	21.4189	0.008%	N/C	579	546		16.58	10.52	
					579	560	-12.0%	16.58	11.31	-29.6%
					579	422		16.58	13.17	

TWISTED PAIRS/WIRE A/WITH VARNISH-HFC-134a/ICI Emkarox VG32 oil @260°F(127°C)

500 hours in HFC-134a/ICI Emakrox Vg32 oil @ 260°F(127°C)												
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE	
POLYESTER	U-475 A1	22.3938	22.4092	0.069%	N/C	16.24	19.67		329	576		
						16.24	16.84	-1.25%	342	591	68.91%	
						16.24	11.60		359	566		
	Y-390 B1	24.0027	24.0680	0.272%	N/C	18.77	19.09		418	415		
						18.77	10.17	-23.67%	449	589	19.90%	
						18.77	13.72		488	611		
	ER-610 C1	22.8487	22.8680	0.084%	N/C	15.57	16.39		328	379		
						15.57	15.00	-4.32%	348	387	1.63%	
						15.57	13.30		395	295		
	Y-833 D1	23.9403	23.9320	-0.035%	N/C	12.04	8.87		461	544		
						12.04	12.53	-0.64%	468	405	2.64%	
						12.04	14.44		437	492		
POLYAMIDE	923 E1	24.2698	24.3057	0.148%	N/C	16.76	11.02		564	573		
						16.76	18.30	-10.26%	578	577	-0.06%	
						16.76	15.80		561	583		
	ISO-800 F1	23.1253	23.1582	0.142%	N/C	19.08	19.85		530	510		
						19.08	18.03	-13.87%	553	574	-8.68%	
						19.08	11.42		576	431		
	500 hours in HFC-134a/ICI Emkarox VG32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
	IMIDE	U-475 A2	22.6357	22.6343	-0.006%	N/C	16.24	11.79		316	375	
							16.24	19.30	-9.17%	383	351	-4.44%
							16.24	13.16		348	372	
		Y-390 B2	24.6039	24.6219	0.073%	N/C	18.77	17.07		388	463	
							18.77	10.78	-25.81%	577	535	-16.00%
						18.77	cracked		475	456		
ER-610 C2		22.8116	22.8105	-0.005%	N/C	15.57	14.44		320	387		
						15.57	14.33	-13.49%	373	342	-5.00%	
						15.57	11.64		352	334		
Y-833 D2		23.6940	23.6644	-0.125%	N/C	12.04	10.03		565	522		
						12.04	10.91	-11.71%	433	433	10.62%	
						12.04	10.95		563	482		
923 E2	24.3026	24.3197	0.070%	N/C	16.76	9.80		538	499			
					16.76	11.73	-32.32%	517	470	-5.74%		
					16.76	12.50		570	493			
ISO-800 F2	23.0629	23.0732	0.045%	N/C	19.08	11.96		455	555			
					19.08	12.11	-33.51%	615	562	-6.72%		
					19.08	13.99		579	604			

TWISTED PAIRS/WIRE B/WITH VARNISH -HFC-134a/ICI Emkarox VG32 oil @260°F(127°C)

500 HOURS in HFC-134a/ICI Emkarox VG32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	WT% Change	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MIDEX POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER	U-475 A1	25.3090	25.3619	0.21%	N/C	13.32	11.56		746	736	
						13.32	15.27	5.33%	746	744	-1.30%
						13.32	15.26		746	729	
	Y-390 B1	23.3394	23.4174	0.33%	N/C	12.28	12.17		755	745	
						12.28	7.88	-24.27%	755	732	-2.08%
						12.28	7.85		755	741	
	ER-610 C1	26.6008	26.6449	0.17%	N/C	12.73	14.21		734	731	
						12.73	14.41	11.44%	734	731	-0.36%
						12.73	13.94		734	732	
	Y-833 D1	25.5990	25.6154	0.06%	N/C	12.49	13.02		734	736	
						12.49	12.89	4.32%	734	730	-0.27%
						12.49	13.18		734	730	
POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER	923 E1	27.0922	27.1789	0.32%	N/C	14.38	16.52		742	748	
						14.38	17.87	19.33%	742	749	0.99%
						14.38	17.09		742	751	
	ISO-800 F1	25.2469	25.3295	0.33%	N/C	12.29	13.69		747	739	
						12.29	12.79	9.71%	747	744	-0.40%
						12.29	13.97		747	749	
	HFC-134a/ICI Emkarox VG32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)										
	U-475 A2	25.6381	25.6470	0.03%	N/C	13.32	13.01		746	732	
						13.32	11.74	-10.49%	746	739	-1.30%
						13.32	11.02		746	738	
	Y-390 B2	23.6776	23.7055	0.12%	N/C	12.28	13.63		755	736	
						12.28	13.70	10.07%	755	740	-2.25%
						12.28	13.22		755	751	
POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER POLYESTER	ER-610 C2	26.5407	26.5457	0.02%	N/C	12.73	11.94		734	732	
						12.73	12.54	-4.14%	734	730	-0.41%
						12.73	12.13		734	731	
	Y-833 D2	25.4461	25.4249	-0.08%	N/C	12.49	11.76		734	729	
						12.49	11.36	-8.01%	734	729	-0.59%
						12.49	11.35		734	731	
	923 E2	26.3245	26.3547	0.11%	N/C	14.38	12.56		742	731	
						14.38	11.84	-16.83%	742	742	-1.48%
						14.38	11.48		742	733	
	ISO-800 F2	25.6768	25.7042	0.11%		12.29	11.05		747	751	
					N/C	12.29	11.94	-4.26%	747	747	0.27%
						12.29	12.31		747	752	

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-134a/ICI Emkarox VG 32 @ 260°F(127°C)

500 Hours in HFC-134a/ICI Emkarox VG32 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE POLYAMIDE	U-475 A1	22.5183	22.5535	0.156%	N/C	15.10	13.66		469	578	
						15.10	19.20	7.31%	469	432	4.48%
						15.10	15.75		469	460	
	Y-390 B1	24.8377	24.8925	0.221%	N/C	18.24	19.86		473	555	
						18.24	19.09	5.43%	473	583	21.07%
						18.24	18.74		473	580	
	ER-610 C1	22.7342	22.7440	0.043%	N/C	14.53	14.77		494	408	
						14.53	17.53	9.70%	494	376	-23.62%
						14.53	15.52		494	348	
	Y-833 D1	22.4418	22.4400	-0.008%	N/C	11.38	14.86		557	576	
						11.38	14.10	32.84%	557	548	0.90%
						11.38	16.39		557	562	
	923 E1	25.0012	25.0753	0.296%	N/C	15.85	15.04		503	593	
						15.85	19.84	10.58%	503	582	15.71%
						15.85	17.70		503	571	
	ISO-800 F1	24.0493	24.0899	0.169%	N/C	14.75	19.78		632	633	
						14.75	19.37	33.02%	632	563	-11.18%
						14.75	19.71		632	488	
	HFC-134a/ICI Emkarox VG32 @ 260°F plus 24 hours @ 302°F(150°C)										
	U-475 A2	22.6268	22.6319	0.023%	N/C	15.10	16.54		469	411	
						15.10	18.60	5.25%	469	545	-0.64%
						15.10	12.54		469	442	
	Y-390 B2	24.5944	24.6110	0.067%	N/C	18.24	15.11		473	551	
						18.24	10.31	-28.04%	473	569	17.97%
						18.24	15.94		473	554	
	ER-610 C2	23.0389	23.0414	0.011%	N/C	14.53	14.64		494	367	
						14.53	10.61	-11.72%	494	369	-26.72%
						14.53	13.23		494	350	
	Y-833 D2	26.2202	26.2071	-0.050%	N/C	11.38	13.06		557	560	
						11.38	11.26	0.26%	557	468	-11.97%
						11.38	9.91		557	443	
	923 E2	23.9750	23.9935	0.077%	N/C	15.85	18.66		503	573	
						15.85	18.64	17.67%	503	564	13.65%
						15.85	cracked		503	578	
	ISO-800 F2	23.2109	23.2274	0.071%	N/C	14.75	11.96		632	489	
						14.75	12.11	-13.99%	632	478	-24.95%
						14.75	13.99		632	456	

HELICAL COILS/WIRE A---HFC-134a/ICI Emkarox VG32 @260°F(127°C)

500 HRS in HFC-134a/ICI Emkarox VG 32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE	U-475 A1	39.0940	39.1372	0.111%	N/C	73.73	65.57	-15.32%
						73.73	63.37	
						73.73	58.37	
	Y-390 B1	40.3319	40.3685	0.091%	N/C	43.78	34.55	-21.89%
						43.78	27.07	
						43.78	40.97	
	ER-610 C1	38.8073	38.8354	0.072%	N/C	51.81	55.42	0.89%
						51.81	59.27	
						51.81	42.12	
	Y-833 D1	38.0479	37.9932	-0.144%	N/C	9.85	32.02	113.20%
						9.85	23.90	
						9.85	7.08	
	923 E1	39.6854	39.7017	0.041%	N/C	41.28	30.92	-25.03%
						41.28	28.27	
						41.28	33.65	
	ISO-800 F1	37.4423	37.4830	0.109%	N/C	45.01	53.12	-1.31%
						45.01	35.72	
						45.01	34.45	
500 HRS in HFC-134a/ICI Emkarox VG32 @ 260 F -> 24 HRS 302°F								
U-475 A2	40.5050	40.5137	0.021%	N/C	73.73	61.27	-0.03%	
					73.73	60.57		
					73.73	86.85		
Y-390 B2	40.0615	40.0747	0.033%	N/C	43.78	41.82	-2.51%	
					43.78	43.32		
					43.78	42.90		
ER-610 C2	39.6375	39.6479	0.026%	N/C	51.81	54.65	16.01%	
					51.81	74.52		
					51.81	51.15		
Y-833 D2	36.9117	36.8671	-0.121%	N/C	9.85	12.75	200.24%	
					9.85	36.47		
					9.85	39.50		
923 E2	39.6950	39.7092	0.036%	N/C	41.28	42.12	6.08%	
					41.28	48.65		
					41.28	40.60		
ISO-800 F2	37.8353	37.8554	0.053%	N/C	45.01	56.72	14.78%	
					45.01	40.22		
					45.01	58.05		

HELICAL COILS/WIRE B-HFC-134a/ICI Emkarox VG32 Oil @ 260°F(127°C)

500 HRS in HFC-134a/ICI Emkarox VG32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE EPOXY GLASS	U-475 A1	37.7722	37.8249	0.140%	N/C	40.14	29.27	-7.62%
						40.14	39.22	
						40.14	42.75	
	Y-390 B1	37.6591	37.7100	0.135%	N/C	36.12	46.67	37.11%
						36.12	52.35	
						36.12	49.55	
	ER-610 C1	37.0123	37.0374	0.068%	N/C	35.96	33.55	-18.46%
						35.96	23.85	
						35.96	30.57	
	Y-833 D1	34.8684	34.8261	-0.121%	N/C	33.14	31.50	6.36%
						33.14	31.52	
						33.14	42.72	
	923 E1	37.9468	37.9422	-0.012%	N/C	40.52	42.45	-0.50%
						40.52	36.35	
						40.52	42.15	
	ISO-800 F1	36.7049	36.7603	0.151%	N/C	20.20	12.85	-7.39%
						20.20	21.40	
						20.20	21.87	
500 HRS in HFC-134a/ICI Emkarox VG32 @ 260 F -> 24 HRS 302°F								
U-475 A2	37.3615	37.3782	0.045%	N/C	40.14	28.95	-23.13%	
					40.14	30.67		
					40.14	32.95		
Y-390 B2	36.1183	36.1416	0.065%	N/C	36.12	48.72	33.13%	
					36.12	43.92		
					36.12	51.62		
ER-610 C2	37.4741	37.4919	0.047%	N/C	35.96	30.70	-14.78%	
					35.96	27.02		
					35.96	34.22		
Y-833 D2	35.7157	35.6246	-0.255%	N/C	33.14	18.52	-0.38%	
					33.14	50.80		
					33.14	29.72		
923 E2	37.4064	37.4244	0.048%	N/C	40.52	38.25	-15.42%	
					40.52	30.05		
					40.52	34.52		
ISO-800 F2	36.0720	36.0974	0.070%	N/C	20.20	7.90	-17.38%	
					20.20	27.60		
					20.20	14.57		

HELICAL COILS/WIRE C-HFC-134a/ICI Emkarox VG32 @ 260°F(127°C)

500 HRS in HFC-134a/ICI Emkarox VG32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTERIMIDE POLYLAMIDE	U-475 A1	37.9887	38.0183	0.078%	N/C	51.21	41.25	-35.94%
						51.21	37.02	
						51.21	20.15	
	Y-390 B1	39.7495	39.8392	0.226%	N/C	50.72	24.42	-51.50%
						50.72	24.00	
						50.72	25.37	
	ER-610 C1	37.9399	37.9718	0.084%	N/C	58.33	68.62	-39.17%
						58.33	19.60	
						58.33	18.22	
	Y-833 D1	37.3195	37.1624	-0.421%	N/C	5.84	14.85	74.66%
						5.84	3.60	
						5.84	12.15	
	923 E1	37.5626	37.5972	0.092%	N/C	49.26	22.47	-54.25%
						49.26	22.32	
						49.26	22.82	
	ISO-800 F1	37.3354	37.3759	0.108%	N/C	36.08	broken	-37.33%
						36.08	25.07	
						36.08	20.15	
500 HRS in HFC-134a/Emkarox VG32 @ 260 F-> 24 HRS 302°F								
POLYLAMIDEIMIDE	U-475 A2	36.7453	36.7527	0.020%	N/C	51.21	70.07	34.15%
						51.21	64.47	
						51.21	71.55	
	Y-390 B2	37.1141	37.1252	0.030%	N/C	50.72	41.25	-21.35%
						50.72	45.27	
						50.72	33.15	
	ER-610 C2	36.2693	36.2822	0.036%	N/C	58.33	57.57	-10.71%
						58.33	45.80	
						58.33	52.87	
	Y-833 D2	37.7010	37.5208	-0.478%	N/C	5.84	11.80	-14.95%
						5.84	1.50	
						5.84	1.60	
	923 E2	38.7391	38.7712	0.083%	N/C	49.26	28.55	-31.66%
						49.26	34.05	
						49.26	38.40	
	ISO-800 F2	38.0233	38.0407	0.046%	N/C	36.08	31.15	-3.02%
						36.08	35.52	
						36.08	38.30	

SINGLE MAG WIRE WITHOUT VARNISH-HFC-134a/ICI Emkarox VG32 @ 260°F(127°C))

500 HRS in HFC-134a/ICI Emkarox VG32 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.6219	3.6233	0.039%	N/C	
					YES
B1	3.3462	3.3513	0.152%	N/C	
					YES
C1	3.2042	3.2058	0.050%	N/C	
					YES
500 HRS in HFC-134a/Emkarox oil-> 302°F for 24 HRS					
A2	3.2982	3.298	-0.006%	N/C	
					YES
B2	3.2914	3.2918	0.012%	N/C	
					YES
C2	3.4976	3.4978	0.006%	N/C	
					YES

SINGLE/WIRE A/WITH VARNISH--HFC-134a/ICI Emkarox VG32 @ 260°F(127°C)

500 HRS in HFC-134a/ICI emkarox VG32 oil @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTERIMIDE	U-475 A1	4.1653	4.1690	0.089%	N/C	
						NO
	Y-390 B1	3.8557	3.8620	0.163%	N/C	
						NO
	ER-610 C1	3.7192	3.7200	0.022%	N/C	
						YES
	Y-833 D1	3.9430	3.9445	0.038%	N/C	
						YES
	923 E1	4.6321	4.6401	0.173%	N/C	
						NO
	ISO-800 F1	4.0499	4.0551	0.128%	N/C	
						NO
HFC-134a/ICI Emkarox VG 32 oil @ 260°F -> 24 HRS @ 302F						
POLYAMIDEIMIDE	U-475 A2	4.1486	4.1458	-0.067%	N/C	
						YES
	Y-390 B2	3.8449	3.8467	0.047%	N/C	
						NO
	ER-610 C2	3.5629	3.5623	-0.017%	N/C	
						YES
	Y-833 D2	3.9915	3.9915	0.000%	N/C	
						YES
	923 E2	4.4848	4.4869	0.047%	N/C	
						NO
	ISO-800 F2	4.0798	4.0829	0.076%	N/C	
						NO

SINGLE/WIRE B/WITH VARNISH--HFC-134A/ICI Emkarox VG 32 oil @ 260°F(127°C)

500 HRS in HFC-134a/ICI Emkarox VG32Oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	4.4075	4.4126	0.116%	N/C	
						NO
	Y-390 B1	4.2166	4.2266	0.237%	N/C	
						NO
	ER-610 C1	4.3992	4.4034	0.095%	N/C	
						NO
	Y-833 D1	4.2983	4.3043	0.140%	N/C	
						NO
	923 E1	4.0349	4.0415	0.164%	N/C	
						NO
	ISO-800 F1	4.3536	4.3639	0.237%	N/C	
						NO
HFC-134a/Emkarox 500 hr exp. plus 24 hrs.@302°F						
U-475 A2	4.2861	4.2841	-0.047%	N/C		
					NO	
Y-390 B2	4.4921	4.4981	0.134%	N/C		
					NO	
ER-610 C2	4.3370	4.3366	-0.009%	N/C		
					YES	
Y-833 D2	4.2552	4.2554	0.005%	N/C		
					YES	
923 E2	4.1871	4.1898	0.064%	N/C		
					NO	
ISO-800 F2	3.9266	3.9298	0.081%	N/C		
					NO	

500 HRS in HFC-134a/Emkarox VG 32 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE	U-475 A1	4.3024	4.3070	0.106%	N/C	NO
	Y-390 B1	3.6431	3.6499	0.187%	N/C	NO
	ER-610 C1	3.9803	3.9832	0.073%	N/C	NO
	Y-833 D1	3.7024	3.7032	0.022%	N/C	YES
	923 E1	4.2848	4.2923	0.175%	N/C	NO
	ISO-800 F1	4.1927	4.1984	0.136%	N/C	NO
	HFC-134a/Emkarox oil -> 24 HRS @ 302°F					
	U-475 A2	4.3412	4.3404	-0.018%	N/C	NO
	Y-390 B2	4.3317	4.3349	0.074%	N/C	NO
	ER-610 C2	3.5121	3.5124	0.009%	N/C	YES
	Y-833 D2	4.1421	4.1407	-0.034%	N/C	YES
	923 E2	4.4334	4.4360	0.059%	N/C	NO
	ISO-800 F2	4.1974	4.2002	0.067%	N/C	NO

Varnish Disks----HFC-134a/ICI Emkarox VG 32 Oil @ 260°F(127°F)

500 HRS IN R-134a/ICI Emkarox VG32 @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.2979	2.3144	0.72%	Slightly warped	N/C
Y-390 B1	1.7789	1.7719	0.39%	N/C	N/C
ER-610 C1	2.1911	2.2599	3.14%	N/C	N/C
Y-833 D1	3.5244	3.6102	2.43%	N/C	N/C
923 E1	2.4599	2.4139	-1.87%	Warped	N/C
ISO-800 F1	2.0935	2.0523	-1.97%	N/C	N/C
R-134a/ICI Emkarox VG 32 at --->24 hour at 302°F.					
U-475 A2	2.6905	2.6300	-2.25%	Darkened	N/C
				Slightly warped	
Y-390 B2	1.9718	1.9195	-2.65%	N/C	N/C
ER-610 C2	2.3770	2.3779	0.04%	Darkened	N/C
Y-833 D2	3.1032	3.0855	-0.57%	Darkened	N/C
923 E2	2.0671	2.0134	-2.60%	Warped	
				Darkened	N/C
ISO-800 F2	2.3994	2.3371	-2.60%	darkened	
					N/C

SHEET INSULATION-HFC-134a/ICI Emkarox VG 32 oil @ 260°F(127°C)

500 HRS in HFC-134a/ICI Emkarox VG32 Oil @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	%CHANGE TENSILE
NO/MY/NO A1	7.3689	7.8635	6.71%	0.388	134.70	21	17.4	16.53	
				0.391	130.00	21	17.4	15.83	-8.34%
				0.402	130.70	21	17.4	15.48	
DA/MY/DA B1	7.7708	7.7399	-0.40%	0.511	146.90	21	13.7	13.69	
				0.395	105.10	21	13.7	12.67	-7.51%
				0.400	97.90	21	13.7	11.65	
MYLAR MO C1	4.1569	4.2105	1.29%	0.495	86.50	10	21.7	17.47	
				0.500	90.75	10	21.7	18.15	-17.46%
				0.405	73.35	10	21.7	18.11	
NO 410 D1	3.7015	4.1586	12.35%	0.520	88.50	10	18.7	17.02	
				0.490	81.90	10	18.7	16.71	-7.98%
				0.422	75.50	10	18.7	17.89	
NO MI 418 E1	3.4430	4.0560	17.80%	0.510	29.55	10	7.5	5.79	
				0.510	30.75	10	7.5	6.03	-23.05%
				0.510	28.00	10	7.5	5.49	
MEL 228 F1	4.0313	4.1154	2.09%	0.410	70.35	10	21.7	17.16	
				0.458	82.80	10	21.7	18.08	-18.85%
				0.457	80.40	10	21.7	17.59	
500 HRS in HFC-134a/ICI Emkarox VG32 Oil @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	7.4209	7.5053	1.14%	0.450	161.70	21	17.4	17.11	
				0.375	138.90	21	17.4	17.64	-0.63%
				0.495	178.00	21	17.4	17.12	
DA/MY/DA B2	7.1469	7.0263	-1.69%	0.410	109.50	21	13.7	12.72	
				0.381	103.90	21	13.7	12.99	-6.69%
				0.375	99.60	21	13.7	12.65	
MYLAR MO C2	3.9156	3.9054	-0.26%	0.407	71.65	10	21.7	17.60	
				0.432	73.70	10	21.7	17.06	-20.78%
				0.451	76.25	10	21.7	16.91	
NOMEX 410 D2	3.7359	3.8339	2.62%	0.492	96.85	10	18.7	19.68	
				0.518	101.30	10	18.7	19.56	6.42%
				0.520	106.40	10	18.7	20.46	
NO/MI 418 E2	3.8019	3.8249	0.60%	0.508	31.75	10	7.5	6.25	
				0.508	29.75	10	7.5	5.86	-19.03%
				0.490	29.95	10	7.5	6.11	
MEL 228 F2	4.4396	4.4396	0.00%	0.430	70.60	10	21.7	16.42	
				0.482	81.05	10	21.7	16.82	-23.12%
				0.490	82.40	10	21.7	16.82	

SHEET INSULATION-HFC-134a/ICI Emkarox VG 32 oil @ 260°F(127°C)

500 HRS in HFC-134a/ICI Emkarox VG32 Oil @ 260 F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A1	0.62	15.5%	20.0%		>18.97	flash		Big bubbles developed
	0.52	13.0%	20.0%	-28.8%	>18.97	flash	flash	
	0.41	10.3%	20.0%		>18.97	flash		
DA/MY/DA B1	0.55	27.5%	46.0%		>15.27	flash		Slightly Warped
	0.54	27.0%	46.0%	-47.8%	>15.27	flash	flash	
	0.35	17.5%	46.0%		>15.27	flash		
MYLAR MO C1	2.24	112.0%	131.0%		>14.91	flash		N/C
	2.89	144.5%	131.0%	1.8%	>14.91	flash	flash	
	2.87	143.5%	131.0%		>14.91	flash		
NO 410 D1	0.31	15.5%	17.0%		10.67	flash		N/C
	0.46	11.5%	17.0%	-30.4%	10.67	flash	flash	
	0.34	8.5%	17.0%		10.67	flash		
NO MI 418 E1	0.05	1.3%	4.0%		10.23	9.17		N/C
	0.06	1.5%	4.0%	-66.7%	10.23	9.60	-13.0%	
	0.05	1.3%	4.0%		10.23	7.94		
MEL 228 F1	3.04	152.0%	160.0%		>14.22	flash		N/C
	3.56	178.0%	160.0%	1.5%	>14.22	flash	flash	
	3.14	157.0%	160.0%		>14.22	flash		
500 HRS in HFC-134a/ICI Emkarox VG32 Oil @ 260 F ->24 HRS @ 302°F								
NO/MY/NO A2	0.40	10.0%	20.0%		>18.97	flash		Bubbles as above also darkened
	0.59	14.8%	20.0%	-40.4%	>18.97	flash	flash	
	0.44	11.0%	20.0%		>18.97	flash		
DA/MY/DA B2	0.44	22.0%	46.0%		>15.27	flash		Slightly warped darkened
	0.41	20.5%	46.0%	-53.3%	>15.27	flash	flash	
	0.44	22.0%	46.0%		>15.27	flash		
MYLAR MO C2	2.41	120.5%	131.0%		>14.91	flash		N/C
	2.20	110.0%	131.0%	-6.7%	>14.91	flash	flash	
	2.72	136.0%	131.0%		>14.91	flash		
NOMEX 410 D2	0.30	7.5%	17.0%		10.67	11.20		slightly Darkened few pockets
	0.32	8.0%	17.0%	-48.5%	10.67	9.19	-3.4%	
	0.43	10.8%	17.0%		10.67	10.54		
NO/MI 418 E2	0.04	1.0%	4.0%		10.23	9.61		N/C
	0.04	1.0%	4.0%	-77.1%	10.23	9.62	-4.2%	
	0.03	0.8%	4.0%		10.23	10.17		
MEL 228 F2	2.14	107.0%	160.0%		>14.22	flash		N/C
	2.99	149.5%	160.0%	-10.2%	>14.22	flash	flash	
	3.49	174.5%	160.0%		>14.22	flash		

SLEEVING--HFC-134a/ICI Emkarox VG 32 Oil @ 260°F(127°C)

500 HRS in HFC-134a/ICI Emkarox VG 32 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5475	0.6251	14.17%	N/C
B1 MYLAR	0.5209	0.5320	2.13%	small Pockets when rubbed between fingers tube bacame cloudy in appearance
C1 NO/MY	0.3931	0.4127	4.99%	some small pockets
HFC-134a/ICI Emkarox VG32 oil @ 260°F plus24 hrs @ 302°F				
A2 NOMEX	0.5607	0.5858	4.48%	Slightly Darkened
B2 MYLAR	0.4472	0.4452	-0.45%	no pockets warped Darkened
C2 NO/MY	0.3957	0.3964	0.18%	slightly darkened some pockets where mylar pulled away.

TAPE--HFC-134a/ICI Emkarox VG32 oil @ 260°F(127°C)

500 HRS in HFC-134a/ICI Emkarox VG32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.7612	1.7637	0.14%	39.02	49.50		0.05	2.50%	N/C
				39.02	52.60	37.24%	0.05	2.50%	
				39.02	58.55		0.06	3.00%	
B1 Polyester	0.7222	0.7332	1.52%	56.12	59.10		0.67	33.50%	N/C
				56.12	58.85	5.87%	0.70	35.00%	
				56.12	60.30		0.70	35.00%	
C1 Permacel	1.6011	1.8334	14.51%	88.50	45.45		0.16	8.00%	Slightly
				88.50	46.15	-47.93%	0.12	6.00%	darkened
				88.50	46.65		0.14	7.00%	Curled up
500 HRS in HFC-134a/ICI Emkarox VG32 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.6269	1.6257	-0.07%	39.02	66.20		0.07	3.50%	N/C
				39.02	55.60	59.15%	0.06	3.00%	
				39.02	64.50		0.06	3.00%	
B2 Polyester	0.6570	0.6566	-0.06%	56.12	51.20		0.59	29.50%	N/C
				56.12	54.38	-2.51%	0.58	29.00%	
				56.12	58.55		0.74	37.00%	
C2 Permacel	1.6392	1.4265	-12.98%	88.50	111.30		0.13	6.50%	Slightly
				88.50	112.30	12.11%	0.14	7.00%	Darkened
				88.50	74.05		0.10	5.00%	Curled up

TIE CORD--HFC-134a/ICI Emkarox VG32 oil @ 260°F(127°C)

500 HRS IN R-134a/ICI Emkarox VG32 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.3073	0.3097	0.78%	N/C	28.36	32.05		0.42	21.0%
					28.36	33.75	15.71%	0.44	22.0%
					28.36	32.65		0.44	22.0%
500 HRS IN R-134a/ICI Emkarox VG32 -> 24 HRS @ 302°F									
A2	0.3308	0.3271	-1.119%	N/C	28.36	35.20		0.52	26.0%
					28.36	32.00	12.60%	0.47	23.5%
					28.36	28.60		0.40	20.0%

LEAD WIRE INSULATION-HFC-134a/ICI Emkarox VG32 @ 260°F(127°C)

500 HRS IN HFC-134a/ICI Emkarox VG32 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	3.9868	4.1276	3.53%	N/C	9.61	7.54	
A 1					9.61	7.84	-14.01%
					9.61	9.41	
DTMD	4.2939	4.4234	3.02%	N/C	9.95	9.55	
B1					9.95	13.97	23.89%
					9.95	13.46	
HFC-134a/ICI Emkarox VG32 @ 260°F -> 24 HRS @ 302°F							
DMD	4.0105	4.0530	1.06%	N/C	9.61	9.34	
A 2					9.61	9.52	1.46%
					9.61	10.39	
DTMD	4.2991	4.3301	0.72%	N/C	9.95	9.06	
B2					9.95	11.20	5.46%
					9.95	11.22	

Appendix N

**Experimental Data for HFC-32/ICI Emkarox
VG32 Exposure at 126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-32/ICI Emkarox VG32 oil @260°F(127°C)

500 hours in HFC-32/ICI Emkarox VG32 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	23.2679	23.2837	0.068%	N/C	576	387		15.80	15.20	
					576	411	-30.2%	15.80	16.69	-9.3%
					576	409		15.80	11.08	
B1	24.0092	24.0629	0.224%	N/C	736	731		11.62	15.60	
					736	626	-5.4%	11.62	15.59	27.1%
					736	731		11.62	13.10	
C1	23.4613	23.4800	0.080%	N/C	579	411		16.58	9.71	
					579	568	-20.8%	16.58	14.19	-16.6%
					579	397		16.58	17.57	
500 hours in HFC-32/ICI Emkarox VG32 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	26.1094	26.1107	0.005%	N/C	576	532		15.80	12.94	
					576	533	-8.3%	15.80	13.26	-14.6%
					576	519		15.80	14.26	
B2	24.1791	24.1929	0.057%	N/C	736	730		11.62	11.09	
					736	586	-7.4%	11.62	12.78	3.1%
					736	729		11.62	12.06	
C2	23.0145	23.0150	0.002%	N/C	579	505		16.58	11.71	
					579	560	-5.6%	16.58	15.69	-13.8%
					579	574		16.58	15.49	

TWISTED PAIRS/WIRE A/WITH VARNISH-HFC-32/ICI Emkarox VG32 oil @260°F(127°C)

500 hours in HFC-32/ICI Emakrox Vg32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE	U-475 A1	22.2075	22.2262	0.084%	N/C	16.24	18.60		329	311	
						16.24	16.13	4.15%	342	369	0.19%
						16.24	16.01		359	348	
	Y-390 B1	23.8225	23.8834	0.256%	N/C	18.77	19.00		418	473	
						18.77	17.00	-1.92%	449	430	-2.90%
						18.77	19.23		488	405	
	ER-610 C1	22.5570	22.5790	0.098%	N/C	15.57	19.79		328	346	
						15.57	11.66	-2.06%	348	361	2.39%
						15.57	14.30		395	362	
	Y-833 D1	23.5932	23.5815	-0.050%	N/C	12.04	16.84		461	498	
						12.04	12.87	25.69%	468	442	0.57%
						12.04	15.69		437	472	
	923 E1	24.0456	24.1240	0.326%	N/C	16.76	19.99		564	454	
						16.76	19.97	5.31%	578	421	-23.82%
						16.76	12.99		561	446	
	ISO-800 F1	23.7970	23.8377	0.171%	N/C	19.08	18.89		530	560	
						19.08	19.81	-2.25%	553	376	-8.74%
						19.08	17.25		576	578	
500 hours in HFC-32/ICI Emkarox VG32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
POLYAMIDE	U-475 A2	22.4562	22.4515	-0.021%	N/C	16.24	15.97		316	345	
						16.24	16.09	-10.71%	383	344	-16.88%
						16.24	11.44		348	266	
	Y-390 B2	24.8404	24.8440	0.014%	N/C	18.77	16.84		388	543	
						18.77	16.08	-6.04%	577	534	-9.76%
						18.77	19.99		475	485	
	ER-610 C2	22.9406	22.9398	-0.003%	N/C	15.57	10.44		320	380	
						15.57	14.00	-26.31%	373	416	4.11%
						15.57	9.98		352	369	
	Y-833 D2	24.2168	24.1752	-0.172%	N/C	12.04	11.65		565	554	
						12.04	11.63	-5.98%	433	565	32.10%
						12.04	10.68		563	597	
	923 E2	23.8721	23.8785	0.027%	N/C	16.76	16.62		538	545	
						16.76	16.72	5.67%	517	466	-8.58%
						16.76	19.79		570	407	
	ISO-800 F2	23.2770	23.2963	0.083%	N/C	19.08	16.30		455	581	
						19.08	15.61	-11.50%	615	550	-9.70%
						19.08	18.75		579	535	

500 HOURS in HFC-32/ICI Emkarox VG32 oil @ 260°F(127°C)												
	VARN	TWISTED PAIR WT	WT% Change	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE	
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	25.7741	25.8337	0.23%	N/C	13.32	14.86		746	741		
						13.32	14.29	10.84%	746	738	-0.94%	
						13.32	15.14		746	738		
	Y-390 B1	25.8778	25.9291	0.20%	N/C	12.28	11.84		755	740		
						12.28	11.20	-6.89%	755	743	-2.03%	
						12.28	11.26		755	736		
	ER-610 C1	25.2453	25.2899	0.18%	N/C	12.73	14.21		734	732		
						12.73	14.00	11.50%	734	733	-0.23%	
						12.73	14.37		734	732		
	Y-833 D1	25.1551	25.1694	0.06%	N/C	12.49	13.28		734	734		
						12.49	12.98	5.36%	734	731	-0.50%	
						12.49	13.22		734	726		
	923 E1	26.3421	26.4119	0.26%	N/C	14.38	13.16		742	754		
						14.38	8.05	-25.48%	742	739	0.18%	
						14.38	10.94		742	737		
	ISO-800 F1	25.1048	25.1929	0.35%	N/C	12.29	13.37		747	738		
						12.29	13.87	10.28%	747	739	-1.43%	
						12.29	13.42		747	732		
	HFC-32/ICI Emkarox VG32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
	U-475 A2	25.7197	25.7273	0.03%	N/C	13.32	13.82		746	732		
						13.32	12.99	0.50%	746	732	-1.52%	
						13.32	13.35		746	740		
	Y-390 B2	23.3858	23.3968	0.05%	N/C	12.28	10.30		755	735		
						12.28	9.86	-8.20%	755	743	-2.12%	
					12.28	13.66		755	736			
ER-610 C2	24.6277	24.6335	0.02%	N/C	12.73	12.80		734	728			
					12.73	12.21	-1.62%	734	728	-1.32%		
					12.73	12.56		734	717			
Y-833 D2	25.6926	25.6787	-0.05%	N/C	12.49	11.54		734	728			
					12.49	12.35	-0.53%	734	750	0.27%		
					12.49	13.38		734	730			
923 E2	26.7664	26.7723	0.02%	N/C	14.38	10.73		742	757			
					14.38	13.86	-14.77%	742	750	2.02%		
					14.38	12.18		742	746			
ISO-800 F2	24.7633	24.7996	0.15%		12.29	12.16		747	725			
				N/C	12.29	11.96	-1.76%	747	740	-1.94%		
					12.29	12.10		747	734			

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-32/ICI Emkarox VG 32 @ 260°F(127°C)

500 Hours in HFC-32/ICI Emkarox VG32 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER IMIDE	U-475 A1	23.6882	23.7334	0.191%	N/C	15.10	17.30		469	370	
						15.10	18.43	19.27%	469	470	-1.56%
						15.10	18.30		469	545	
	Y-390 B1	24.2749	24.3216	0.192%	N/C	18.24	19.78		473	555	
						18.24	19.77	8.81%	473	549	19.17%
						18.24	19.99		473	587	
	ER-610 C1	22.4530	22.4761	0.103%	N/C	14.53	18.30		494	414	
						14.53	13.40	1.26%	494	380	-22.06%
						14.53	12.44		494	361	
	Y-833 D1	21.6475	21.6421	-0.025%	N/C	11.38	14.37		557	453	
						11.38	15.15	23.84%	557	533	-16.10%
						11.38	12.76		557	416	
	923 E1	24.0401	24.0750	0.145%	N/C	15.85	16.98		503	560	
						15.85	19.83	17.03%	503	481	-6.03%
						15.85	18.84		503	377	
	ISO-800 F1	23.5762	23.6223	0.196%	N/C	14.75	16.37		632	638	
						14.75	11.23	-6.44%	632	545	-9.49%
						14.75	cracked		632	533	
	HFC-32/ICI Emkarox VG32 @ 260°F plus 24 hours @ 302°F(150°C)										
	U-475 A2	22.6758	22.6808	0.022%	N/C	15.10	17.27		469	506	
						15.10	18.07	17.31%	469	344	-13.08%
						15.10	17.80		469	373	
	Y-390 B2	22.7896	22.7899	0.001%	N/C	18.24	11.50		473	429	
						18.24	15.91	-34.18%	473	581	4.51%
						18.24	8.10		473	473	
	ER-610 C2	21.9312	21.9299	-0.006%	N/C	14.53	12.76		494	373	
						14.53	cracked	-5.85%	494	473	-15.45%
						14.53	14.60		494	407	
	Y-833 D2	21.4674	21.4481	-0.090%	N/C	11.38	14.17		557	473	
						11.38	14.81	16.81%	557	454	-15.50%
						11.38	10.90		557	485	
	923 E2	23.0874	23.0899	0.011%	N/C	15.85	19.91		503	498	
						15.85	13.15	11.57%	503	386	-14.45%
						15.85	19.99		503	407	
	ISO-800 F2	23.9378	23.9587	0.087%	N/C	14.75	19.82		632	589	
						14.75	15.16	14.53%	632	555	-9.65%
						14.75	15.70		632	569	

HELICAL COILS/WIRE A---HFC-32/ICI Emkarox VG32 @260°F(127°C)

500 HRS in HFC-32/ICI Emkarox VG 32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE	U-475 A1	39.4516	39.5271	0.191%	N/C	73.73	50.07	-26.90%
						73.73	BROKE	
						73.73	57.72	
	Y-390 B1	40.1169	40.1945	0.193%	N/C	43.78	55.27	37.27%
						43.78	65.50	
						43.78	59.52	
	ER-610 C1	39.3832	39.4454	0.158%	N/C	51.81	70.27	25.48%
						51.81	59.02	
						51.81	65.75	
	Y-833 D1	39.4364	39.3644	-0.183%	N/C	9.85	39.05	284.23%
						9.85	49.67	
						9.85	24.82	
	923 E1	39.8227	39.8769	0.136%	N/C	41.28	36.12	-17.22%
						41.28	34.00	
						41.28	32.40	
	ISO-800 F1	38.5385	38.6154	0.200%	N/C	45.01	49.42	7.08%
						45.01	46.97	
						45.01	38.22	
500 HRS in HFC-32/ICI Emkarox VG32 @ 260 F -> 24 HRS 302°F								
U-475 A2	40.3427	40.3612	0.046%	N/C	73.73	69.27	-19.51%	
					73.73	63.07		
					73.73	55.62		
Y-390 B2	39.3290	39.3427	0.035%	N/C	43.78	47.25	9.14%	
					43.78	39.42		
					43.78	56.67		
ER-610 C2	41.1511	41.1575	0.016%	N/C	51.81	85.60	28.68%	
					51.81	53.20		
					51.81	61.20		
Y-833 D2	37.6600	37.5984	-0.164%	N/C	9.85	74.90	323.01%	
					9.85	13.20		
					9.85	36.90		
923 E2	37.4656	37.4848	0.051%	N/C	41.28	41.90	-4.03%	
					41.28	38.20		
					41.28	38.75		
ISO-800 F2	40.6489	40.6830	0.084%	N/C	45.01	47.60	1.62%	
					45.01	57.27		
					45.01	32.35		

HELICAL COILS/WIRE B-HFC-32/ICI Emkarox VG32 Oil @ 260°F(127°C)

500 HRS in HFC-32/ICI Emkarox VG32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE EIMIDE EPOXY GLASS	U-475 A1	37.4549	37.5233	0.183%	N/C	40.14	49.87	22.56%
						40.14	46.72	
						40.14	51.00	
	Y-390 B1	36.7117	36.8251	0.309%	N/C	36.12	54.57	48.64%
						36.12	52.60	
						36.12	53.90	
	ER-610 C1	37.8198	37.9058	0.227%	N/C	35.96	35.25	-4.16%
						35.96	33.02	
						35.96	35.12	
	Y-833 D1	35.0460	34.9982	-0.136%	N/C	33.14	36.02	-10.47%
						33.14	28.82	
						33.14	24.17	
	923 E1	36.3769	36.4733	0.265%	N/C	40.52	46.17	8.87%
						40.52	45.12	
						40.52	41.05	
	ISO-800 F1	36.9607	37.0612	0.272%	N/C	20.20	18.87	10.05%
						20.20	22.50	
						20.20	25.32	
500 HRS in HFC-32/ICI Emkarox VG32 @ 260 F -> 24 HRS 302°F								
U-475 A2	37.9453	37.9538	0.022%	N/C	40.14	34.65	-12.50%	
					40.14	29.82		
					40.14	40.90		
Y-390 B2	37.3597	37.3764	0.045%	N/C	36.12	41.20	13.58%	
					36.12	41.42		
					36.12	40.45		
ER-610 C2	37.0202	37.0334	0.036%	N/C	35.96	32.27	-16.35%	
					35.96	28.62		
					35.96	29.35		
Y-833 D2	34.9830	34.8787	-0.298%	N/C	33.14	27.90	16.14%	
					33.14	43.17		
					33.14	44.40		
923 E2	37.5785	37.5923	0.037%	N/C	40.52	42.75	3.26%	
					40.52	43.20		
					40.52	39.57		
ISO-800 F2	37.1318	37.1656	0.091%	N/C	20.20	18.62	2.59%	
					20.20	21.60		
					20.20	21.95		

HELICAL COILS/WIRE C-HFC-32/ICI Emkarox VG32 @ 260°F(127°C)

500 HRS in HFC-32/ICI Emkarox VG32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTERIMIDE	U-475 A1	37.5559	37.6277	0.191%	N/C	51.21	68.22	28.05%
						51.21	65.60	
						51.21	62.90	
	Y-390 B1	39.7760	39.8369	0.153%	N/C	50.72	31.87	-38.38%
						50.72	30.72	
						50.72	31.17	
	ER-610 C1	38.6720	38.7359	0.165%	N/C	58.33	62.77	8.89%
						58.33	51.00	
						58.33	76.77	
	Y-833 D1	37.8830	37.6767	-0.545%	N/C	5.84	23.72	170.78%
						5.84	17.52	
						5.84	6.20	
923 E1	39.4839	39.5785	0.240%	N/C	49.26	22.07	-50.16%	
					49.26	25.12		
					49.26	26.47		
ISO-800 F1	38.2542	38.3129	0.153%	N/C	36.08	23.40	-30.85%	
					36.08	26.50		
					36.08	broke		
500 HRS in HFC-32/Emkarox VG32 @ 260 F-> 24 HRS 302°F								
POLYAMIDEIMIDE	U-475 A2	37.5806	37.5988	0.048%	N/C	51.21	62.75	30.33%
						51.21	67.97	
						51.21	69.50	
	Y-390 B2	40.7149	40.7164	0.004%	N/C	50.72	43.72	-18.89%
						50.72	39.97	
						50.72	39.72	
	ER-610 C2	39.4108	39.4180	0.018%	N/C	58.33	70.22	15.26%
						58.33	69.10	
						58.33	62.37	
	Y-833 D2	38.4201	38.2437	-0.459%	N/C	5.84	31.72	325.17%
						5.84	19.37	
						5.84	23.40	
923 E2	39.6042	39.6074	0.008%	N/C	49.26	38.87	-26.62%	
					49.26	34.37		
					49.26	35.20		
ISO-800 F2	38.7936	38.8128	0.049%	N/C	36.08	47.57	-24.16%	
					36.08	21.27		
					36.08	13.25		

SINGLE MAG WIRE WITHOUT VARNISH-HFC-32/ICI Emkarox VG32 @ 260°F(127°C))

500 HRS in HFC-32/ICI Emkarox VG32 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.3121	3.314	0.057%	N/C	
					NO
B1	3.4008	3.4073	0.191%	N/C	
					NO
C1	3.5312	3.5339	0.076%	N/C	
					NO
500 HRS in HFC-32/Emkarox oil-> 302°F for 24 HRS					
A2	3.6291	3.63	0.025%	N/C	
					YES
B2	3.335	3.3377	0.081%	N/C	
					YES
C2	3.4362	3.4374	0.035%	N/C	
					YES

500 HRS in HFC-32/ICI emkarox VG32 oil @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTERIMIDE POLYAMIDE	U-475 A1	4.2601	4.2612	0.026%	N/C	
						NO
	Y-390 B1	3.9329	3.9385	0.142%	N/C	
						NO
	ER-610 C1	3.7677	3.7721	0.117%	N/C	
						NO
	Y-833 D1	3.7976	3.7989	0.034%	N/C	
						YES
	923 E1	4.5442	4.5521	0.174%	N/C	
						NO
	ISO-800 F1	4.0404	4.0472	0.168%	N/C	
						NO
HFC-32/ICI Emkarox VG 32 oil @ 260°F -> 24 HRS @ 302F						
U-475 A2	4.2277	4.2246	-0.073%	N/C		
					NO	
Y-390 B2	3.8471	3.8474	0.008%	N/C		
					NO	
ER-610 C2	3.7538	3.7531	-0.019%	N/C		
					NO	
Y-833 D2	3.9877	3.9858	-0.048%	N/C		
					YES	
923 E2	4.4502	4.4509	0.016%	N/C		
					NO	
ISO-800 F2	4.2027	4.2049	0.052%	N/C		
					NO	

500 HRS in HFC-32/ICI Emkarox VG32Oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE EPM OXYPOLYGLASS	U-475 A1	3.9025	3.9047	0.056%	N/C	
						NO
	Y-390 B1	4.5899	4.6059	0.349%	N/C	
						NO
	ER-610 C1	4.2543	4.2598	0.129%	N/C	
						NO
	Y-833 D1	4.3029	4.3086	0.132%	N/C	
						YES
	923 E1	4.1842	4.1914	0.172%	N/C	
						NO
HFC-32/Emkarox 500 hr exp. plus 24 hrs.@302°F	U-475 A2	4.4067	4.4036	-0.070%	N/C	
						NO
	Y-390 B2	4.2447	4.2472	0.059%	N/C	
						NO
	ER-610 C2	4.3187	4.3191	0.009%	N/C	
						NO
	Y-833 D2	4.2996	4.3003	0.016%	N/C	
						YES
	923 E2	3.9449	3.9459	0.025%	N/C	
						NO
ISO-800 F2	4.3469	4.3517	0.110%	N/C		NO

500 HRS in HFC-32/Emkarox VG 32 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE	U-475 A1	4.3960	4.4046	0.196%	N/C	NO
	Y-390 B1	3.7957	3.8036	0.208%	N/C	NO
	ER-610 C1	3.8516	3.8548	0.083%	N/C	YES
	Y-833 D1	4.1456	4.1479	0.055%	N/C	YES
	923 E1	4.1089	4.1165	0.185%	N/C	NO
	ISO-800 F1	4.2640	4.2706	0.155%	N/C	NO
	HFC-32/Emkarox oil -> 24 HRS @ 302°F					
	U-475 A2	4.4004	4.3999	-0.011%	N/C	NO
	Y-390 B2	3.9092	3.9121	0.074%	N/C	NO
	ER-610 C2	3.6462	3.6470	0.022%	N/C	NO
	Y-833 D2	4.1344	4.1342	-0.005%	N/C	YES
	923 E2	4.5153	4.5171	0.040%	N/C	YES
	ISO-800 F2	4.2431	4.2465	0.080%	N/C	NO

500 HRS IN R-32/ICI Emkarox VG32 @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.9860	2.9802	-0.19%	N/C	N/C
Y-390 B1	1.9188	1.9243	0.29%	N/C	N/C
ER-610 C1	2.6391	2.7146	2.86%	Slightly Darkened	N/C
Y-833 D1	3.2833	3.3054	0.67%	N/C	N/C
923 E1	2.7264	2.6456	-2.96%	Warped	lightened
ISO-800 F1	1.7445	1.7253	-1.10%	N/C	N/C
R-32/ICI Emkarox VG 32 at --->24 hour at 302°F.					
U-475 A2	3.0373	2.9512	-2.83%	Darkened Slightly warped	Cloudy appearance on surface
Y-390 B2	2.0302	1.9775	-2.60%	slightly warped	N/C
ER-610 C2	2.7027	2.7062	0.13%	slightly darkened	N/C
Y-833 D2	4.0676	3.9079	-3.93%	N/C	N/C
923 E2	2.0522	1.9633	-4.33%	Warped lightened	N/C
ISO-800 F2	2.0326	1.9764	-2.76%	slightly warped	N/C

500 HRS in HFC-32/ICI Emkarox VG32 Oil @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	4.2830	4.6089	7.61%	0.387	125.90	21	17.4	15.49	
				0.446	150.10	21	17.4	16.03	-8.80%
				0.375	126.70	21	17.4	16.09	
DA/MY/DA B1	4.3871	4.4495	1.42%	0.370	100.80	21	13.7	12.97	
				0.464	130.50	21	13.7	13.39	-6.81%
				0.391	98.00	21	13.7	11.94	
MYLAR MO C1	2.2271	2.2505	1.05%	0.420	76.75	10	21.7	18.27	
				0.415	70.75	10	21.7	17.05	-18.82%
				0.410	71.85	10	21.7	17.52	
NO 410 D1	2.2068	2.5156	13.99%	0.490	88.35	10	18.7	18.03	
				0.492	89.05	10	18.7	18.10	-5.56%
				0.492	82.90	10	18.7	16.85	
NO MI 418 E1	2.2645	2.7773	22.65%	0.482	30.00	10	7.5	6.22	
				0.509	31.75	10	7.5	6.24	-16.11%
				0.492	31.55	10	7.5	6.41	
MEL 228 F1	2.3586	2.3969	1.62%	0.469	79.70	10	21.7	16.99	
				0.423	75.30	10	21.7	17.80	-17.54%
				0.494	93.30	10	21.7	18.89	
500 HRS in HFC-32/ICI Emkarox VG32 Oil @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	4.2187	4.3160	2.31%	0.410	141.20	21	17.4	16.40	
				0.380	134.90	21	17.4	16.90	-3.47%
				0.383	137.40	21	17.4	17.08	
DA/MY/DA B2	4.6832	4.6681	-0.32%	0.397	109.60	21	13.7	13.15	
				0.422	117.70	21	13.7	13.28	-4.49%
				0.375	101.00	21	13.7	12.83	
MYLAR MO C2	2.3691	2.3631	-0.25%	0.444	70.50	10	21.7	15.88	
				0.406	66.15	10	21.7	16.29	-26.22%
				0.435	69.00	10	21.7	15.86	
NOMEX 410 D2	2.3429	2.4302	3.73%	0.480	92.00	10	18.7	19.17	
				0.492	94.45	10	18.7	19.20	1.83%
				0.484	90.80	10	18.7	18.76	
NO/MI 418 E2	2.2381	2.2608	1.01%	0.515	32.85	10	7.5	6.38	
				0.500	31.20	10	7.5	6.24	-17.51%
				0.515	30.60	10	7.5	5.94	
MEL 228 F2	2.3657	2.3701	0.19%	0.523	89.70	10	21.7	17.15	
				0.501	84.85	10	21.7	16.94	-21.84%
				0.420	70.55	10	21.7	16.80	

SHEET INSULATION-HFC-32/ICI Emkarox VG 32 oil @ 260°F(127°C)

500 HRS in HFC-32/ICI Emkarox VG32 Oil @ 260 F								
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	VISUAL EXP
NO/MY/NO A1	0.64	16.0%	20.0%		>18.97	flash		small bubbles developed pockets
	0.69	17.3%	20.0%	-16.9%	>18.97	flash	flash	
	0.68	17.0%	20.0%		>18.97	flash		
DA/MY/DA B1	0.48	24.0%	46.0%		>15.27	flash		Slightly Warped
	0.54	27.0%	46.0%	-47.8%	>15.27	flash	flash	
	0.42	21.0%	46.0%		>15.27	flash		
MYLAR MO C1	2.94	147.0%	131.0%		>14.91	flash		N/C
	2.62	131.0%	131.0%	5.2%	>14.91	flash	flash	
	2.71	135.5%	131.0%		>14.91	flash		
NO 410 D1	0.41	20.5%	17.0%		10.67	12.27		N/C
	0.46	11.5%	17.0%	-22.5%	10.67	12.92	19.3%	
	0.30	7.5%	17.0%		10.67	12.99		
NO MI 418 E1	0.05	1.3%	4.0%		10.23	9.71		N/C
	0.04	1.0%	4.0%	-70.8%	10.23	8.66	-5.9%	
	0.05	1.3%	4.0%		10.23	10.51		
MEL 228 F1	3.11	155.5%	160.0%		>14.22	flash		slightly yellowed
	3.30	165.0%	160.0%	-1.8%	>14.22	flash	flash	
	3.02	151.0%	160.0%		>14.22	flash		
500 HRS in HFC-32/ICI Emkarox VG32 Oil @ 260 F ->24 HRS @ 302°F								
NO/MY/NO A2	0.36	9.0%	20.0%		>18.97	flash		Bubbles pockets as above but bigger
	0.52	13.0%	20.0%	-41.3%	>18.97	flash	flash	
	0.53	13.3%	20.0%		>18.97	flash		
DA/MY/DA B2	0.46	23.0%	46.0%		>15.27	flash		Slightly warped darkened
	0.46	23.0%	46.0%	-53.3%	>15.27	flash	flash	
	0.37	18.5%	46.0%		>15.27	flash		
MYLAR MO C2	2.59	129.5%	131.0%		>14.91	flash		N/C
	2.41	120.5%	131.0%	-0.6%	>14.91	flash	flash	
	2.81	140.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.37	9.3%	17.0%		10.67	10.51		few pockets
	0.34	8.5%	17.0%	-50.0%	10.67	10.84	1.4%	
	0.31	7.8%	17.0%		10.67	11.11		
NO/MI 418 E2	0.04	1.0%	4.0%		10.23	9.72		N/C
	0.04	1.0%	4.0%	-75.0%	10.23	10.69	0.7%	
	0.04	1.0%	4.0%		10.23	10.50		
MEL 228 F2	2.79	139.5%	160.0%		>14.22	flash		slightly yellowed
	2.90	144.8%	160.0%	-8.6%	>14.22	flash	flash	
	3.09	154.5%	160.0%		>14.22	flash		

500 HRS in HFC-32/ICI Emkarox VG 32 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5570	0.6385	14.63%	N/C
B1 MYLAR	0.4786	0.4875	1.86%	small Pockets when rubbed between fingers tube bacame cloudy in appearance
C1 NO/MY	0.3999	0.4234	5.88%	some small pockets
HFC-32/ICI Emkarox VG32 oil @ 260°F plus24 hrs @ 302°F				
A2 NOMEX	0.5584	0.5955	6.64%	N/C
B2 MYLAR	0.4633	0.4654	0.45%	some pockets Darkened
C2 NO/MY	0.3878	0.3912	0.88%	slightly darkened some pockets where mylar pulled away.

500 HRS in HFC-32/ICI Emkarox VG32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD		%ELONG	EXP VIS
A1 Glass	1.8604	1.8727	0.66%	39.02	70.60		0.06	3.00%	N/C
				39.02	71.65	79.22%	0.07	3.50%	
				39.02	67.55		0.06	3.00%	
B1 Polyester	0.7228	0.7357	1.78%	56.12	60.30		0.70	35.00%	N/C
				56.12	57.00	6.02%	0.59	29.50%	
				56.12	61.20		0.76	38.00%	
C1 Permacel	1.6518	1.7254	4.46%	88.50	39.00		0.14	7.00%	
				88.50	40.60	-55.08%	0.15	7.50%	
				88.50	39.65		0.15	7.50%	Curled up
500 HRS in HFC-32/ICI Emkarox VG32 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.6875	1.6875	0.00%	39.02	49.90		0.05	2.50%	N/C
				39.02	51.10	29.25%	0.05	2.50%	
				39.02	50.30		0.04	2.00%	
B2 Polyester	0.7281	0.7251	-0.41%	56.12	48.60		0.39	19.50%	N/C
				56.12	57.80	-1.52%	0.68	34.00%	
				56.12	59.40		0.67	33.50%	
C2 Permacel	1.5229	1.3850	-9.06%	88.50	97.90		0.13	6.50%	Slightly
				88.50	68.55	-5.05%	0.09	4.50%	
				88.50	85.65		0.11	5.50%	Curled up

TIE CORD--HFC-32/ICI Emkarox VG32 oil @ 260°F(127°C)

500 HRS IN R-32/ICI Emkarox VG32 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.3081	0.3116	1.14%	N/C	28.36	32.95		0.44	22.0%
					28.36	32.15	16.13%	0.44	22.0%
					28.36	33.70		0.42	21.0%
500 HRS IN R-32/ICI Emkarox VG32 -> 24 HRS @ 302° F									
A2	0.3091	0.3073	-0.582%	N/C	28.36	35.10		0.46	23.0%
					28.36	34.20	25.82%	0.47	23.5%
					28.36	37.75		0.53	26.5%

LEAD WIRE INSULATION-HFC-32/ICI Emkarox VG32 @ 260°F(127°C)

500 HRS IN HFC-32/ICI Emkarox VG32 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.0632	4.2218	3.90%	N/C	9.61	7.56	
A1					9.61	8.89	-14.36%
					9.61	8.24	
DTMD	4.2893	4.4205	3.06%	N/C	9.95	12.40	
B1					9.95	13.31	30.62%
					9.95	13.28	
HFC-32/ICI Emkarox VG32 @ 260°F -> 24 HRS @ 302°F							
DMD	4.0809	4.1333	1.28%	N/C	9.61	8.79	
A2					9.61	7.69	-11.20%
					9.61	9.12	
DTMD	4.3318	4.3724	0.94%	N/C	9.95	11.79	
B2					9.95	12.23	18.39%
					9.95	11.32	

Appendix O

**Experimental Data for HFC-125/ICI
Emkarox VG32 Exposure at 126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-125/ICI Emkarox VG32 oil @260°F(127°C)

500 hours in HFC-125/ICI Emkarox VG32 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	23.0548	23.0555	0.003%	N/C	576	564		15.80	16.54	
					576	556	-3.0%	15.80	11.70	-4.6%
					576	557		15.80	16.99	
B1	25.3615	25.3932	0.125%	N/C	736	729		11.62	14.50	
					736	730	-2.7%	11.62	14.64	22.7%
					736	689		11.62	13.63	
C1	22.2454	22.2468	0.006%	N/C	579	577		16.58	12.56	
					579	588	0.6%	16.58	9.26	-30.9%
					579	583		16.58	12.53	
500 hours in HFC-125/ICI Emkarox VG32 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	22.72	22.7202	0.001%	N/C	576	541		15.80	11.94	
					576	473	-12.0%	15.80	14.16	-14.6%
					576	507		15.80	14.39	
B2	24.4631	24.4686	0.022%	N/C	736	730		11.62	12.00	
					736	724	-1.1%	11.62	11.59	2.2%
					736	729		11.62	12.04	
C2	22.4597	22.4606	0.004%	N/C	579	573		16.58	15.85	
					579	434	-8.9%	16.58	15.45	-12.4%
					579	576		16.58	12.29	

TWISTED PAIRS/WIRE A/WITH VARNISH-HFC-125/ICI Emkarox VG32 oil @260°F(127°C)

	500 hours in HFC-125/ICI Emakrox Vg32 oil @ 260°F(127°C)										
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE	U-475 A1	22.3952	22.3955	0.001%	N/C	16.24	19.92		329	559	
						16.24	16.34	7.55%	342	366	26.12%
						16.24	16.14		359	369	
	Y-390 B1	24.9848	25.0100	0.101%	N/C	18.77	19.83		418	528	
						18.77	17.93	1.92%	449	388	12.10%
						18.77	19.63		488	594	
	ER-610 C1	22.7758	22.9780	0.888%	N/C	15.57	11.96		328	381	
						15.57	16.24	-1.65%	348	398	6.23%
						15.57	17.74		395	330	
	Y-833 D1	23.5022	23.4916	-0.045%	N/C	12.04	13.25		441	530	
						12.04	12.94	8.00%	468	558	16.03%
						12.04	12.82		437	541	
	923 E1	22.9901	22.9981	0.035%	N/C	16.76	16.84		564	575	
						16.76	12.11	-3.68%	578	582	-8.30%
						16.76	19.48		561	433	
	ISO-800 F1	22.6756	22.6960	0.090%	N/C	19.08	19.79		530	516	
						19.08	19.71	-1.59%	553	545	-0.66%
						19.08	16.83		576	587	
	500 hours in HFC-125/ICI Emkarox VG32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)										
MID E	U-475 A2	22.6416	22.6323	-0.041%	N/C	16.24	12.81		316	383	
						16.24	10.93	-16.65%	383	566	35.07%
						16.24	16.87		348	603	
	Y-390 B2	25.4120	25.4222	0.040%	N/C	18.77	17.71		388	588	
						18.77	13.01	-10.94%	577	554	-2.77%
						18.77	19.43		475	541	
	ER-610 C2	22.4460	22.4450	-0.004%	N/C	15.57	13.51		320	374	
						15.57	13.49	-14.93%	373	416	6.97%
						15.57	12.98		352	407	
	Y-833 D2	23.4673	23.4551	-0.052%	N/C	12.04	11.15		565	505	
						12.04	10.24	-11.49%	433	481	18.17%
						12.04	10.58		563	549	
	923 E2	23.3534	23.3554	0.009%	N/C	16.76	17.74		538	472	
						16.76	19.60	6.07%	517	454	-10.90%
						16.76	15.99		570	456	
	ISO-800 F2	22.6761	22.6834	0.032%	N/C	19.08	13.18		455	572	
						19.08	14.45	-28.09%	615	586	-4.77%
						19.08	13.53		579	599	

TWISTED PAIRS/WIRE B/WITH VARNISH -HFC-125/ICI Emkarox VG32 oil @260°F(127°C)

500 HOURS in HFC-125/ICI Emkarox VG32 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	WT% Change	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MIDEX GLASS	U-475 A1	26.1393	26.1643	0.10%	N/C	13.32	10.50		746	731	
						13.32	12.93	-17.82%	746	736	-1.65%
						13.32	9.41		746	734	
	Y-390 B1	26.3437	26.3900	0.18%	N/C	12.28	11.00		755	750	
						12.28	Cracked	-3.34%	755	749	-0.79%
						12.28	12.74		755	748	
	ER-610 C1	25.6848	25.7088	0.09%	N/C	12.73	11.79		734	731	
						12.73	13.87	-6.18%	734	691	-2.32%
						12.73	10.17		734	729	
	Y-833 D1	24.3986	24.3932	-0.02%	N/C	12.49	13.00		734	731	
						12.49	13.70	2.67%	734	735	-0.23%
						12.49	11.77		734	731	
	923 E1	26.6716	26.7024	0.12%	N/C	14.38	16.39		742	751	
						14.38	14.84	12.68%	742	747	1.08%
						14.38	17.38		742	752	
	ISO-800 F1	24.9589	25.0200	0.24%	N/C	12.29	13.10		747	736	
						12.29	13.27	7.43%	747	734	-1.43%
						12.29	13.24		747	739	
HFC-125/ICI Emkarox VG32 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
MIDEX POLYESTER GLASS	U-475 A2	26.0012	26.0008	0.00%	N/C	13.32	11.67		746	731	
						13.32	12.17	-9.73%	746	732	-1.88%
						13.32	12.23		746	733	
	Y-390 B2	23.4206	23.4217	0.00%	N/C	12.28	13.31		755	746	
						12.28	14.74	14.90%	755	735	-1.92%
						12.28	14.28		755	735	
	ER-610 C2	25.8155	25.8179	0.01%	N/C	12.73	13.59		734	729	
						12.73	11.84	1.94%	734	726	-0.91%
						12.73	13.50		734	727	
	Y-833 D2	24.5453	24.5398	-0.02%	N/C	12.49	12.29		734	726	
						12.49	12.73	-0.64%	734	733	-0.27%
						12.49	12.21		734	737	
	923 E2	26.6841	26.6912	0.03%	N/C	14.38	13.41		742	753	
						14.38	13.19	1.51%	742	747	1.48%
						14.38	17.19		742	750	
	ISO-800 F2	25.2472	25.2469	0.00%		12.29	13.19		747	737	
					N/C	12.29	13.15	-2.28%	747	744	-0.87%
						12.29	9.69		747	739	

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-125/ICI Emkarox VG 32 @ 260°F(127°C)

500 Hours in HFC-125/ICI Emkarox VG32 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE	U-475 A1	23.0745	23.0780	0.015%	N/C	15.10	14.79		469	331	
						15.10	18.30	11.21%	469	348	-26.44%
						15.10	17.29		469	356	
	Y-390 B1	23.9563	23.9753	0.079%	N/C	18.24	16.23		473	507	
						18.24	19.83	-7.64%	473	549	14.52%
						18.24	14.48		473	569	
	ER-610 C1	21.9102	21.9128	0.012%	N/C	14.53	14.70		494	315	
						14.53	13.76	4.15%	494	352	-29.89%
						14.53	16.94		494	372	
	Y-833 D1	21.2447	21.2329	-0.056%	N/C	11.38	15.09		557	512	
						11.38	14.95	31.20%	557	561	-1.86%
						11.38	14.75		557	567	
923 E1	23.2926	23.2958	0.014%	N/C	15.85	18.33		503	636		
					15.85	19.76	17.83%	503	521	2.65%	
					15.85	17.94		503	392		
ISO-800 F1	23.7322	23.7587	0.112%	N/C	14.75	16.76		632	585		
					14.75	19.99	27.77%	632	634	-2.22%	
					14.75	19.79		632	635		
HFC-125/ICI Emkarox VG32 @ 260°F plus 24 hours @ 302°F(150°C)											
POLYAMIDEIMIDE	U-475 A2	22.9789	22.9803	0.006%	N/C	15.10	19.33		469	571	
						15.10	19.95	29.76%	469	520	15.57%
						15.10	19.50		469	535	
	Y-390 B2	24.1247	24.1303	0.023%	N/C	18.24	19.89		473	493	
						18.24	19.89	6.52%	473	402	0.70%
						18.24	18.97		473	534	
	ER-610 C2	22.0432	22.0424	-0.004%	N/C	14.53	15.20		494	414	
						14.53	13.74	-3.79%	494	376	-22.47%
						14.53	13.00		494	359	
	Y-833 D2	21.1846	21.1733	-0.053%	N/C	11.38	14.45		557	570	
						11.38	11.82	13.09%	557	472	-5.27%
						11.38	12.34		557	541	
923 E2	23.4410	23.4429	0.008%	N/C	15.85	19.80		503	475		
					15.85	16.69	14.55%	503	487	-0.27%	
					15.85	17.98		503	543		
ISO-800 F2	23.6657	23.6852	0.082%	N/C	14.75	18.46		632	615		
					14.75	19.81	25.81%	632	649	-1.64%	
					14.75	17.40		632	601		

HELICAL COILS/WIRE A---HFC-125/ICI Emkarox VG32 @260°F(127°C)

	500 HRS in HFC-125/ICI Emkarox VG 32 @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE	U-475 A1	39.5948	39.6174	0.057%	N/C	73.73	69.35	-9.38%
						73.73	78.85	
						73.73	52.25	
	Y-390 B1	38.7379	38.7691	0.081%	N/C	43.78	54.95	-1.35%
						43.78	36.90	
						43.78	37.72	
	ER-610 C1	39.9548	39.9762	0.054%	N/C	51.81	53.40	3.64%
						51.81	61.47	
						51.81	46.22	
	Y-833 D1	38.4136	38.3588	-0.143%	N/C	9.85	64.22	480.15%
						9.85	50.07	
						9.85	BROKE	
	923 E1	39.2956	39.3086	0.033%	N/C	41.28	40.97	-10.58%
						41.28	32.42	
						41.28	37.35	
	ISO-800 F1	38.8864	38.9276	0.106%	N/C	45.01	44.77	-4.59%
						45.01	41.12	
						45.01	45.70	
	500 HRS in HFC-125/ICI Emkarox VG32 @ 260 F -> 24 HRS 302°F							
U-475 A2	38.7944	38.8023	0.020%	N/C	73.73	81.15	10.81%	
					73.73	76.40		
					73.73	87.00		
Y-390 B2	39.5105	39.5113	0.002%	N/C	43.78	50.50	21.78%	
					43.78	51.85		
					43.78	57.60		
ER-610 C2	39.4428	39.4490	0.016%	N/C	51.81	73.40	29.80%	
					51.81	55.20		
					51.81	73.15		
Y-833 D2	38.8314	38.7619	-0.179%	N/C	9.85	49.20	351.10%	
					9.85	20.40		
					9.85	63.70		
923 E2	40.4651	40.4628	-0.006%	N/C	41.28	42.85	6.79%	
					41.28	44.50		
					41.28	44.90		
ISO-800 F2	39.6386	39.6565	0.045%	N/C	45.01	48.00	6.61%	
					45.01	47.70		
					45.01	48.25		

HELICAL COILS/WIRE B-HFC-125/ICI Emkarox VG32 Oil @ 260°F(127°C)

		500 HRS in HFC-125/ICI Emkarox VG32 @ 260 F						
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE EPM OXLEY GLASS	U-475 A1	37.3301	37.3519	0.058%	N/C	40.14	34.72	-18.23%
						40.14	31.05	
						40.14	32.70	
	Y-390 B1	37.9473	37.9829	0.094%	N/C	36.12	44.75	16.50%
						36.12	37.52	
						36.12	43.97	
	ER-610 C1	37.4072	37.4420	0.093%	N/C	35.96	36.47	-2.91%
						35.96	34.35	
						35.96	33.92	
	Y-833 D1	38.2019	38.1392	-0.164%	N/C	33.14	38.87	13.35%
						33.14	52.42	
						33.14	21.40	
	923 E1	37.3735	37.3886	0.040%	N/C	40.52	36.77	-5.32%
						40.52	39.87	
						40.52	38.45	
	ISO-800 F1	37.0402	37.0786	0.104%	N/C	20.20	20.92	5.89%
						20.20	21.25	
						20.20	22.00	
	500 HRS in HFC-125/ICI Emkarox VG32 @ 260 F -> 24 HRS 302°F							
U-475 A2	39.5561	39.5537	-0.006%	N/C	40.14	46.40	16.38%	
					40.14	41.70		
					40.14	52.05		
Y-390 B2	36.5326	36.5430	0.028%	N/C	36.12	37.20	24.31%	
					36.12	48.75		
					36.12	48.75		
ER-610 C2	36.5503	36.5611	0.030%	N/C	35.96	38.85	1.46%	
					35.96	35.90		
					35.96	34.70		
Y-833 D2	35.6443	35.5893	-0.154%	N/C	33.14	29.05	37.30%	
					33.14	55.85		
					33.14	51.60		
923 E2	37.7135	37.7325	0.050%	N/C	40.52	46.70	19.36%	
					40.52	50.95		
					40.52	47.45		
ISO-800 F2	36.6304	36.6419	0.031%	N/C	20.20	25.90	42.57%	
					20.20	33.30		
					20.20	27.20		

HELICAL COILS/WIRE C-HFC-125/ICI Emkarox VG32 @ 260°F(127°C)

500 HRS in HFC-125/ICI Emkarox VG32 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTERIMIDE POLYAMIDE	U-475 A1	39.4142	39.4393	0.064%	N/C	51.21	53.37	7.96%
						51.21	58.52	
						51.21	53.97	
	Y-390 B1	41.1706	41.1926	0.053%	N/C	50.72	43.50	-18.46%
						50.72	38.30	
						50.72	42.27	
	ER-610 C1	38.3091	38.3393	0.079%	N/C	58.33	60.32	13.80%
						58.33	70.20	
						58.33	68.62	
	Y-833 D1	37.7044	37.6438	-0.161%	N/C	5.84	36.22	588.58%
						5.84	39.55	
						5.84	44.87	
	923 E1	39.5881	39.6261	0.096%	N/C	49.26	30.60	-40.54%
						49.26	29.85	
						49.26	27.42	
	ISO-800 F1	39.3185	39.3454	0.068%	N/C	36.08	38.70	9.61%
						36.08	44.22	
						36.08	35.72	
500 HRS in HFC-125/Emkarox VG32 @ 260 F-> 24 HRS 302°F								
POLYESTERIMIDE POLYAMIDE	U-475 A2	39.6362	39.6384	0.006%	N/C	51.21	64.50	42.97%
						51.21	68.35	
						51.21	86.80	
	Y-390 B2	40.4692	40.4695	0.001%	N/C	50.72	56.25	-2.47%
						50.72	52.80	
						50.72	39.35	
	ER-610 C2	39.8207	39.8302	0.024%	N/C	58.33	79.10	33.44%
						58.33	79.95	
						58.33	74.45	
	Y-833 D2	39.4904	39.4030	-0.221%	N/C	5.84	39.65	681.68%
						5.84	44.65	
						5.84	52.65	
	923 E2	38.8978	38.9076	0.025%	N/C	49.26	33.65	-19.27%
						49.26	42.35	
						49.26	43.30	
	ISO-800 F2	39.3770	39.3929	0.040%	N/C	36.08	60.10	42.65%
						36.08	47.00	
						36.08	47.30	

SINGLE MAG WIRE WITHOUT VARNISH-HFC-125/ICI Emkârox VG32 @ 260°F(127°C))

500 HRS in HFC-125/ICI Emkarox VG32 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.3289	3.3301	0.036%	N/C	
					YES
B1	3.0853	3.0886	0.107%	N/C	
					NO
C1	3.6696	3.6704	0.022%	N/C	
					YES
500 HRS in HFC-125/Emkarox oil-> 302°F for 24 HRS					
A2	3.5204	3.521	0.017%	N/C	
					NO
B2	3.5074	3.5085	0.031%	N/C	
					NO
C2	3.4683	3.4688	0.014%	N/C	
					NO

SINGLE/WIRE A/WITH VARNISH--HFC-125/ICI Emkardx VG32 @ 260°F(127°C)

500 HRS in HFC-125/ICI emkarox VG32 oil @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER IMIDE POLYAMIDE	U-475 A1	4.1535	4.1541	0.014%	N/C	
						NO
	Y-390 B1	3.8464	3.8478	0.036%	N/C	
						NO
	ER-610 C1	3.6315	3.6309	-0.017%	N/C	
						YES
	Y-833 D1	4.0929	4.0973	0.108%	N/C	
						NO
	923 E1	4.4918	4.4941	0.051%	N/C	
						NO
	ISO-800 F1	4.0383	4.0383	0.000%	N/C	
						YES
HFC-125/ICI Emkarox VG 32 oil @ 260°F -> 24 HRS @ 302F						
U-475 A2	4.1818	4.1813	-0.012%	N/C		
					NO	
Y-390 B2	3.6474	3.6481	0.019%	N/C		
					NO	
ER-610 C2	3.8566	3.8564	-0.005%	N/C		
					YES	
Y-833 D2	4.1933	4.1956	0.055%	N/C		
					NO	
923 E2	4.6340	4.6351	0.024%	N/C		
					NO	
ISO-800 F2	4.0422	4.0409	-0.032%	N/C		
					YES	

SINGLE/WIRE B/WITH VARNISH--HFC-125/ICI Emkarox VG 32 oil @ 260°F(127°C)

500 HRS in HFC-125/ICI Emkarox VG32Oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE EPOXY GLASS	U-475 A1	4.4030	4.4039	0.020%	N/C	
						NO
	Y-390 B1	4.4546	4.4611	0.146%	N/C	
						NO
	ER-610 C1	4.2265	4.2280	0.035%	N/C	
						NO
	Y-833 D1	4.2622	4.2640	0.042%	N/C	
						NO
	923 E1	4.1489	4.1528	0.094%	N/C	
						NO
	ISO-800 F1	4.0153	4.0209	0.139%	N/C	
						NO
	HFC-125/Emkarox 500 hr exp. plus 24 hrs.@302°F					
	U-475 A2	4.3131	4.3119	-0.028%	N/C	
						NO
	Y-390 B2	4.5390	4.5410	0.044%	N/C	
						NO
	ER-610 C2	4.3097	4.3038	-0.137%	N/C	
						NO
	Y-833 D2	4.2592	4.2578	-0.033%	N/C	
						YES
	923 E2	4.1631	4.1641	0.024%	N/C	
						NO
	ISO-800 F2	4.3816	4.3866	0.114%	N/C	
						NO

500 HRS in HFC-125/Emkarox VG 32 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE	U-475 A1	4.2818	4.2837	0.044%	N/C	NO
	Y-390 B1	3.7059	3.7083	0.065%	N/C	NO
	ER-610 C1	3.8522	3.8570	0.125%	N/C	YES
	Y-833 D1	4.0236	4.0234	-0.005%	N/C	YES
	923 E1	4.4114	4.4131	0.039%	N/C	NO
	ISO-800 F1	4.2573	4.2614	0.096%	N/C	NO
	HFC-125/Emkarox oil -> 24 HRS @ 302°F					
	U-475 A2	4.2898	4.2885	-0.030%	N/C	NO
	Y-390 B2	3.8784	3.8792	0.021%	N/C	NO
	ER-610 C2	3.7026	3.7027	0.003%	N/C	NO
	Y-833 D2	4.0777	4.0781	0.010%	N/C	YES
	923 E2	4.3914	4.3926	0.027%	N/C	NO
	ISO-800 F2	4.2340	4.2372	0.076%	N/C	NO

Varnish Disks----HFC-125/ICI Emkarox VG 32 Oil @ 260°F(127°F)

500 HRS IN R-125/ICI Emkarox VG32 @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.3778	2.3400	-1.59%	N/C	N/C
Y-390 B1	1.9172	1.8785	2.02%	N/C	N/C
ER-610 C1	2.8180	2.8379	0.71%	Slightly Darkened	N/C
Y-833 D1	2.9165	2.8723	-1.52%	N/C	N/C
923 E1	2.2818	2.2420	-1.74%	Warped	N/C
ISO-800 F1	2.1471	2.1308	-0.76%	slightly warped	N/C
R-125/ICI Emkarox VG 32 at --->24 hour at 302°F.					
U-475 A2	2.3172	2.2553	-2.67%	Darkened	Cloudy appearance on surface
Y-390 B2	1.7275	1.6955	-1.85%	N/C	N/C
ER-610 C2	1.8194	1.8198	0.02%	darkened	N/C
Y-833 D2	3.5958	3.6027	0.19%	N/C	N/C
923 E2	2.3593	2.3088	-2.14%	Warped	N/C
ISO-800 F2	1.9143	1.8840	-1.58%	slightly warped	N/C

SHEET INSULATION-HFC-125/ICI Emkarox VG 32 oil @ 260°F(127°C)

500 HRS in HFC-125/ICI Emkarox VG32 Oil @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	4.3484	4.6446	6.81%	0.451	162.40	21	17.4	17.15	
				0.410	143.80	21	17.4	16.70	-0.90%
				0.489	183.60	21	17.4	17.88	
DA/MY/DA B1	4.5114	4.5190	0.17%	0.401	111.50	21	13.7	13.24	
				0.390	109.90	21	13.7	13.42	0.18%
				0.415	126.50	21	13.7	14.52	
MYLAR MO C1	2.1159	2.1237	0.37%	0.500	94.95	10	21.7	18.99	
				0.450	85.05	10	21.7	18.90	-13.94%
				0.410	74.35	10	21.7	18.13	
NO 410 D1	2.4443	2.7771	13.62%	0.451	85.15	10	18.7	18.88	
				0.502	97.40	10	18.7	19.40	0.30%
				0.491	88.30	10	18.7	17.98	
NO MI 418 E1	2.1762	2.7255	25.24%	0.494	32.75	10	7.5	6.63	
				0.510	31.95	10	7.5	6.26	-14.80%
				0.474	29.75	10	7.5	6.28	
MEL 228 F1	2.4962	2.5150	0.75%	0.521	87.65	10	21.7	16.82	
				0.464	78.25	10	21.7	16.86	-22.03%
				0.490	83.65	10	21.7	17.07	
500 HRS in HFC-125/ICI Emkarox VG32 Oil @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	4.3484	4.4336	1.96%	0.375	127.40	21	17.4	16.18	
				0.365	128.50	21	17.4	16.76	-4.37%
				0.400	142.60	21	17.4	16.98	
DA/MY/DA B2	4.3766	4.3461	-0.70%	0.489	135.30	21	13.7	13.18	
				0.380	110.00	21	13.7	13.78	-0.85%
				0.403	116.70	21	13.7	13.79	
MYLAR MO C2	2.1783	2.1762	-0.10%	0.482	87.35	10	21.7	18.12	
				0.500	93.70	10	21.7	18.74	-17.65%
				0.418	70.00	10	21.7	16.75	
NOMEX 410 D2	2.2316	2.3118	3.59%	0.522	104.90	9	18.7	22.33	
				0.495	79.40	9	18.7	17.82	7.50%
				0.498	90.35	9	18.7	20.16	
NO/MI 418 E2	2.4320	2.4516	0.81%	0.515	31.00	10	7.5	6.02	
				0.495	29.25	10	7.5	5.91	-21.88%
				0.455	25.70	10	7.5	5.65	
MEL 228 F2	2.2831	2.2860	0.13%	0.498	81.25	10	21.7	16.32	
				0.522	89.05	10	21.7	17.06	-23.90%
				0.464	75.00	10	21.7	16.16	

SHEET INSULATION-HFC-125/ICI Emkarox VG 32 oil @ 260°F(127°C)

500 HRS in HFC-125/ICI Emkarox VG32 Oil @ 260 F								
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	VISUAL EXP
NO/MY/NO A1	0.67	16.8%	20.0%		>18.97	flash		N/C
	0.47	11.8%	20.0%	-28.8%	>18.97	flash	flash	
	0.71	17.8%	20.0%		>18.97	flash		
DA/MY/DA B1	0.49	24.5%	46.0%		>15.27	flash		Slightly Warped
	0.56	28.0%	46.0%	-43.1%	>15.27	flash	flash	
	0.52	26.0%	46.0%		>15.27	flash		
MYLAR MO C1	2.88	144.0%	131.0%		>14.91	flash		N/C
	2.98	149.0%	131.0%	6.5%	>14.91	flash	flash	
	2.51	125.5%	131.0%		>14.91	flash		
NO 410 D1	0.37	18.5%	17.0%		10.67	flash		N/C
	0.39	9.8%	17.0%	-28.4%	10.67	flash	flash	
	0.33	8.3%	17.0%		10.67	flash		
NO MI 418 E1	0.04	1.0%	4.0%		10.23	11.85		N/C
	0.04	1.0%	4.0%	-75.0%	10.23	11.76	15.1%	
	0.04	1.0%	4.0%		10.23	11.70		
MEL 228 F1	3.01	150.5%	160.0%		>14.22	flash		slightly yellowed
	3.27	163.5%	160.0%	2.3%	>14.22	flash	flash	
	3.54	177.0%	160.0%		>14.22	flash		
500 HRS in HFC-125/ICI Emkarox VG32 Oil @ 260 F ->24 HRS @ 302°F								
NO/MY/NO A2	0.51	12.8%	20.0%		>18.97	flash		Bubbles pockets
	0.51	12.8%	20.0%	-37.1%	>18.97	flash	flash	
	0.49	12.3%	20.0%		>18.97	flash		
DA/MY/DA B2	0.49	24.5%	46.0%		>15.27	flash		Slightly warped darkened
	0.56	28.0%	46.0%	-42.4%	>15.27	flash	flash	
	0.54	27.0%	46.0%		>15.27	flash		
MYLAR MO C2	2.87	143.5%	131.0%		>14.91	flash		N/C
	3.12	156.0%	131.0%	2.8%	>14.91	flash	flash	
	2.09	104.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.46	11.5%	17.0%		10.67	10.91		N/C
	0.20	5.0%	17.0%	-52.0%	10.67	6.15	-12.3%	
	0.32	8.0%	17.0%		10.67	11.02		
NO/MI 418 E2	0.04	1.0%	4.0%		10.23	9.43		N/C
	0.04	1.0%	4.0%	-77.1%	10.23	10.41	-2.5%	
	0.03	0.8%	4.0%		10.23	10.07		
MEL 228 F2	2.39	119.5%	160.0%		>14.22	flash		slightly yellowed
	2.94	147.0%	160.0%	-27.1%	>14.22	flash	flash	
	1.67	83.5%	160.0%		>14.22	flash		

SLEEVING--HFC-125/ICI Emkarox VG 32 Oil @ 260°F(127°C)

500 HRS in HFC-125/ICI Emkarox VG 32 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5457	0.6185	13.34%	N/C
B1 MYLAR	0.4748	0.4812	1.35%	small Pockets when rubbed between fingers tube bacame cloudy in appearance
C1 NO/MY	0.3935	0.4124	4.80%	N/C
HFC-125/ICI Emkarox VG32 oil @ 260°F plus 24 hrs @ 302°F				
A2 NOMEX	0.5432	0.5745	5.76%	N/C
B2 MYLAR	0.4432	0.4451	0.43%	some pockets Darkened
C2 NO/MY	0.3956	0.3980	0.61%	slightly darkened some pockets where mylar pulled away.

500 HRS in HFC-125/ICI Emkarox VG32 @ 260 F										
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD		%ELONG	EXP VIS	
A1 Glass	1.7216	1.7184	-0.19%	39.02	52.85			0.05	2.50%	N/C
				39.02	53.20	30.62%		0.04	2.00%	
				39.02	46.85			0.07	3.50%	
B1 Polyester	0.7252	0.7318	0.91%	56.12	50.70			0.44	22.00%	N/C
				56.12	64.15	3.14%		0.84	42.00%	
				56.12	58.80			0.61	30.50%	
C1 Permacel	1.4849	1.7065	14.92%	88.50	47.15			0.16	8.00%	curled up
				88.50	43.80	-46.85%		0.13	6.50%	
				88.50	50.15			0.16	8.00%	
500 HRS in HFC-125/ICI Emkarox VG32 @ 260 F-> 302°F 24 HRS										
A2 Glass	1.6798	1.6769	-0.17%	39.02	59.90			0.04	2.00%	N/C
				39.02	50.75	26.39%		0.06	3.00%	
				39.02	37.30			0.04	2.00%	
B2 Polyester	0.6955	0.6939	-0.23%	56.12	52.55			0.55	27.50%	N/C
				56.12	53.60	-0.45%		0.48	24.00%	
				56.12	61.45			0.73	36.50%	
C2 Permacel	1.4702	1.2551	-14.63%	88.50	86.05			0.10	5.00%	Slightly
				88.50	83.35	-2.49%		0.10	5.00%	darkened
				88.50	89.50			0.09	4.50%	Curled up

SHEET INSULATION-HFC-125/ICI Emkarox VG 32 oil @ 260°F(127°C)

500 HRS in HFC-125/ICI Emkarox VG32 Oil @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	4.3484	4.6446	6.81%	0.451	162.40	21	17.4	17.15	
				0.410	143.80	21	17.4	16.70	-0.90%
				0.489	183.60	21	17.4	17.88	
DA/MY/DA B1	4.5114	4.5190	0.17%	0.401	111.50	21	13.7	13.24	
				0.390	109.90	21	13.7	13.42	0.18%
				0.415	126.50	21	13.7	14.52	
MYLAR MO C1	2.1159	2.1237	0.37%	0.500	94.95	10	21.7	18.99	
				0.450	85.05	10	21.7	18.90	-13.94%
				0.410	74.35	10	21.7	18.13	
NO 410 D1	2.4443	2.7771	13.62%	0.451	85.15	10	18.7	18.88	
				0.502	97.40	10	18.7	19.40	0.30%
				0.491	88.30	10	18.7	17.98	
NO MI 418 E1	2.1762	2.7255	25.24%	0.494	32.75	10	7.5	6.63	
				0.510	31.95	10	7.5	6.26	-14.80%
				0.474	29.75	10	7.5	6.28	
MEL 228 F1	2.4962	2.5150	0.75%	0.521	87.65	10	21.7	16.82	
				0.464	78.25	10	21.7	16.86	-22.03%
				0.490	83.65	10	21.7	17.07	
500 HRS in HFC-125/ICI Emkarox VG32 Oil @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	4.3484	4.4336	1.96%	0.375	127.40	21	17.4	16.18	
				0.365	128.50	21	17.4	16.76	-4.37%
				0.400	142.60	21	17.4	16.98	
DA/MY/DA B2	4.3766	4.3461	-0.70%	0.489	135.30	21	13.7	13.18	
				0.380	110.00	21	13.7	13.78	-0.85%
				0.403	116.70	21	13.7	13.79	
MYLAR MO C2	2.1783	2.1762	-0.10%	0.482	87.35	10	21.7	18.12	
				0.500	93.70	10	21.7	18.74	-17.65%
				0.418	70.00	10	21.7	16.75	
NOMEX 410 D2	2.2316	2.3118	3.59%	0.522	104.90	9	18.7	22.33	
				0.495	79.40	9	18.7	17.82	7.50%
				0.498	90.35	9	18.7	20.16	
NO/MI 418 E2	2.4320	2.4516	0.81%	0.515	31.00	10	7.5	6.02	
				0.495	29.25	10	7.5	5.91	-21.88%
				0.455	25.70	10	7.5	5.65	
MEL 228 F2	2.2831	2.2860	0.13%	0.498	81.25	10	21.7	16.32	
				0.522	89.05	10	21.7	17.06	-23.90%
				0.464	75.00	10	21.7	16.16	

SHEET INSULATION-HFC-125/ICI Emkarox VG 32 oil @ 260°F(127°C)

500 HRS in HFC-125/ICI Emkarox VG32 Oil @ 260 F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A1	0.67	16.8%	20.0%		>18.97	flash		N/C
	0.47	11.8%	20.0%	-28.8%	>18.97	flash	flash	
	0.71	17.8%	20.0%		>18.97	flash		
DA/MY/DA B1	0.49	24.5%	46.0%		>15.27	flash		Slightly Warped
	0.56	28.0%	46.0%	-43.1%	>15.27	flash	flash	
	0.52	26.0%	46.0%		>15.27	flash		
MYLAR MO C1	2.88	144.0%	131.0%		>14.91	flash		N/C
	2.98	149.0%	131.0%	6.5%	>14.91	flash	flash	
	2.51	125.5%	131.0%		>14.91	flash		
NO 410 D1	0.37	18.5%	17.0%		10.67	flash		N/C
	0.39	9.8%	17.0%	-28.4%	10.67	flash	flash	
	0.33	8.3%	17.0%		10.67	flash		
NO MI 418 E1	0.04	1.0%	4.0%		10.23	11.85		N/C
	0.04	1.0%	4.0%	-75.0%	10.23	11.76	15.1%	
	0.04	1.0%	4.0%		10.23	11.70		
MEL 228 F1	3.01	150.5%	160.0%		>14.22	flash		slightly yellowed
	3.27	167.5%	160.0%	2.3%	>14.22	flash	flash	
	3.54	177.0%	160.0%		>14.22	flash		
500 HRS in HFC-125/ICI Emkarox VG32 Oil @ 260 F ->24 HRS @ 302°F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A2	0.51	12.8%	20.0%		>18.97	flash		Bubbles pockets
	0.51	12.8%	20.0%	-37.1%	>18.97	flash	flash	
	0.49	12.3%	20.0%		>18.97	flash		
DA/MY/DA B2	0.49	24.5%	46.0%		>15.27	flash		Slightly warped darkened
	0.56	28.0%	46.0%	-42.4%	>15.27	flash	flash	
	0.54	27.0%	46.0%		>15.27	flash		
MYLAR MO C2	2.87	143.5%	131.0%		>14.91	flash		N/C
	3.12	156.0%	131.0%	2.8%	>14.91	flash	flash	
	2.09	104.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.46	11.5%	17.0%		10.67	10.91		N/C
	0.20	5.0%	17.0%	-52.0%	10.67	6.15	-12.3%	
	0.32	8.0%	17.0%		10.67	11.02		
NO/MI 418 E2	0.04	1.0%	4.0%		10.23	9.43		N/C
	0.04	1.0%	4.0%	-77.1%	10.23	10.41	-2.5%	
	0.03	0.8%	4.0%		10.23	10.07		
MEL 228 F2	2.39	119.5%	160.0%		>14.22	flash		slightly yellowed
	2.94	147.0%	160.0%	-27.1%	>14.22	flash	flash	
	1.67	83.5%	160.0%		>14.22	flash		

SLEEVING--HFC-125/ICI Emkarox VG 32 Oil @ 260°F(127°C)

	500 HRS in HFC-125/ICI Emkarox VG 32 @ 260°F			
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5457	0.6185	13.34%	N/C
B1 MYLAR	0.4748	0.4812	1.35%	small Pockets when rubbed between fingers tube bacame cloudy in appearance
C1 NO/MY	0.3935	0.4124	4.80%	N/C
	HFC-125/ICI Emkarox VG32 oil @ 260°F plus24 hrs @ 302°F			
A2 NOMEX	0.5432	0.5745	5.76%	N/C
B2 MYLAR	0.4432	0.4451	0.43%	some pockets Darkened
C2 NO/MY	0.3956	0.3980	0.61%	slightly darkened some pockets where mylar pulled away.

500 HRS in HFC-125/ICI Emkarox VG32 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD		%ELONG	EXP VIS
A1 Glass	1.7216	1.7184	-0.19%	39.02	52.85		0.05	2.50%	N/C
				39.02	53.20	30.62%	0.04	2.00%	
				39.02	46.85		0.07	3.50%	
B1 Polyester	0.7252	0.7318	0.91%	56.12	50.70		0.44	22.00%	N/C
				56.12	64.15	3.14%	0.84	42.00%	
				56.12	58.80		0.61	30.50%	
C1 Permacel	1.4849	1.7065	14.92%	88.50	47.15		0.16	8.00%	curled up
				88.50	43.80	-46.85%	0.13	6.50%	
				88.50	50.15		0.16	8.00%	
500 HRS in HFC-125/ICI Emkarox VG32 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.6798	1.6769	-0.17%	39.02	59.90		0.04	2.00%	N/C
				39.02	50.75	26.39%	0.06	3.00%	
				39.02	37.30		0.04	2.00%	
B2 Polyester	0.6955	0.6939	-0.23%	56.12	52.55		0.55	27.50%	N/C
				56.12	53.60	-0.45%	0.48	24.00%	
				56.12	61.45		0.73	36.50%	
C2 Permacel	1.4702	1.2551	-14.63%	88.50	86.05		0.10	5.00%	Slightly
				88.50	83.35	-2.49%	0.10	5.00%	darkened
				88.50	89.50		0.09	4.50%	Curled up

TIE CORD--HFC-125/ICI Emkarox VG32 oil @ 260°F(127°C)

500 HRS IN R-125/ICI Emkarox VG32 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.3560	0.3569	0.25%	N/C	28.36	31.10		0.37	18.5%
					28.36	32.00	10.90%	0.39	19.5%
					28.36	31.25		0.40	20.0%
500 HRS IN R-125/ICI Emkarox VG32 -> 24 HRS @ 302°F									
A2	0.3250	0.3222	-0.862%	N/C	28.36	30.65		0.38	19.0%
					28.36	30.65	10.72%	0.39	19.5%
					28.36	32.90		0.41	20.5%

LEAD WIRE INSULATION-HFC-125/ICI Emkarox VG32 @ 260°F(127°C)

500 HRS IN HFC-125/ICI Emkarox VG32 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	3.9326	4.0754	3.63%	N/C	9.61	8.39	
A 1					9.61	8.11	-11.17%
					9.61	9.11	
DTMD	4.2722	4.4021	3.04%	N/C	9.95	12.31	
B1					9.95	13.96	26.16%
					9.95	11.39	
HFC-125/ICI Emkarox VG32 @ 260°F -> 24 HRS @ 302°F							
DMD	4.0440	4.1207	1.90%	N/C	9.61	9.17	
A 2					9.61	8.74	-5.52%
					9.61	9.33	
DTMD	4.2830	4.3076	0.57%	N/C	9.95	9.89	
B2					9.95	7.74	-9.82%
					9.95	9.29	

Appendix P

**Experimental Data for HFC-134a/Allied
Signal BRL-150 Exposure at 126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-134a/Allied Signal BRL-150 oil @260°F(127°C)

500 hours in HFC-134a/BRL-150 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	23.4786	23.4927	0.060%	N/C	576	472		15.80	11.66	
					576	540	-9.9%	15.80	16.44	-14.4%
					576	545		15.80	12.46	
B1	24.0141	24.0714	0.239%	N/C	736	736		11.62	14.61	
					736	728	-0.6%	11.62	13.95	23.6%
					736	730		11.62	14.51	
C1	22.0007	22.0146	0.063%	N/C	579	593		16.58	12.97	
					579	572	-9.6%	16.58	15.91	-12.6%
					579	406		16.58	14.61	
500 hours in HFC-134a/BRL-150 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	23.9117	23.9149	0.013%	N/C	576	538		15.80	14.86	
					576	531	-7.8%	15.80	12.90	-8.5%
					576	524		15.80	15.60	
B2	24.0572	24.0693	0.050%	N/C	736	734		11.62	11.39	
					736	731	-0.9%	11.62	11.10	1.1%
					736	724		11.62	12.76	
C2	22.9357	22.9411	0.024%	N/C	579	555		16.58	13.06	
					579	579	-5.6%	16.58	16.33	-14.9%
					579	505		16.58	12.92	

500 hours in HFC-134a/BRL-150 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MIDE	U-475 A1	23.1601	23.2410	0.349%	N/C	16.24	14.44		430	331	
						16.24	12.73	-19.42%	430	315	-25.43%
						16.24	12.09		430	316	
	Y-390 B1	23.6949	23.7382	0.183%	N/C	18.77	13.70		510	435	
						18.77	12.50	-18.88%	510	453	-5.36%
						18.77	19.48		510	560	
	ER-610 C1	22.2539	22.2734	0.088%	N/C	15.57	14.16		442	327	
						15.57	12.21	-10.21%	442	378	-22.62%
						15.57	15.57		442	321	
	Y-833 D1	23.0044	23.0098	0.023%	N/C	12.04	14.59		578	448	
						12.04	10.84	-3.93%	578	459	-17.53%
						12.04	9.27		578	523	
	923 E1	22.0139	22.0715	0.262%	N/C	16.76	19.71		606	560	
						16.76	19.78	14.04%	606	563	-5.94%
						16.76	17.85		606	587	
ISO-800 F1	23.8277	23.8778	0.210%	N/C	19.08	16.00		580	555		
					19.08	17.79	-6.36%	580	463	-8.91%	
					19.08	19.81		580	567		
500 hours in HFC-134a/BRL-150 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
IMIDE	U-475 A2	23.1210	23.1229	0.008%	N/C	16.24	13.20		430	358	
						16.24	10.78	-23.40%	430	388	-12.33%
						16.24	13.34		430	385	
	Y-390 B2	23.9253	23.9403	0.063%	N/C	18.77	12.59		510	509	
						18.77	11.96	-34.60%	510	396	-4.38%
						18.77	broke		510	558	
	ER-610 C2	22.5206	22.5260	0.024%	N/C	15.57	12.44		442	434	
						15.57	13.16	-16.23%	442	341	-15.16%
						15.57	13.53		442	350	
	Y-833 D2	21.6981	21.6942	-0.018%	N/C	12.04	12.08		578	555	
						12.04	8.91	-13.32%	578	543	-10.84%
						12.04	10.32		578	448	
	923 E2	22.5176	22.5403	0.101%	N/C	16.76	16.90		606	541	
						16.76	12.92	-22.63%	606	450	-22.50%
						16.76	9.08		606	418	
ISO-800 F2	24.3059	24.3324	0.109%	N/C	19.08	19.78		580	603		
					19.08	18.78	1.75%	580	589	1.49%	
					19.08	19.68		580	574		

500 HOURS in HFC-134a/BRL-150 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	WT% Change	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	30.9829	31.0724	0.29%	N/C	13.32	11.20		746	741	
						13.32	16.41	-4.15%	746	750	-0.27%
						13.32	10.69		746	741	
	Y-390 B1	25.5069	25.8223	1.24%	N/C	12.28	13.08		755	739	
						12.28	15.24	10.15%	755	742	-1.68%
						12.28	12.26		755	746	
	ER-610 C1	24.4245	24.4742	0.20%	N/C	12.73	13.09		734	734	
						12.73	11.20	1.23%	734	731	-0.14%
						12.73	14.37		734	734	
	Y-833 D1	25.7676	25.7958	0.11%	N/C	12.49	12.79		734	734	
						12.49	13.83	7.37%	734	733	-0.18%
						12.49	13.61		734	731	
	923 E1	24.1449	24.2426	0.40%	N/C	14.38	18.69		742	752	
						14.38	17.28	26.84%	742	751	1.30%
						14.38	18.75		742	752	
	ISO-800 F1	24.1919	24.3008	0.45%	N/C	12.29	13.70		747	739	
						12.29	12.44	11.36%	747	740	-1.03%
						12.29	14.92		747	739	
HFC-134a/BRL-150 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
U-475 A2	27.1630	27.1843	0.08%	N/C	13.32	11.38		746	758		
					13.32	13.35	-7.71%	746	748	0.76%	
					13.32	12.15		746	749		
Y-390 B2	27.3279	27.3456	0.06%	N/C	12.28	11.93		755	737		
					12.28	12.76	3.12%	755	736	-2.45%	
					12.28	13.30		755	732		
ER-610 C2	24.1540	24.1681	0.06%	N/C	12.73	10.75		734	731		
					12.73	10.56	-11.02%	734	732	-0.45%	
					12.73	12.67		734	729		
Y-833 D2	25.3778	25.3781	0.00%	N/C	12.49	11.89		734	731		
					12.49	11.30	-7.50%	734	731	-0.36%	
					12.49	11.47		734	732		
923 E2	25.8076	25.8974	0.35%	N/C	14.38	11.24		742	753		
					14.38	9.69	-25.15%	742	753	1.48%	
					14.38	11.36		742	753		
ISO-800 F2	26.4763	26.5418	0.25%		12.29	13.03		747	737		
				N/C	12.29	13.07	1.22%	747	744	-0.87%	
					12.29	11.22		747	735		

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-134a/Allied Signal BRL-150 @ 260°F(127°C)

500 Hours in HFC-134a/BRL-150 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE	U-475 A1	24.0458	24.0830	0.155%	N/C	15.10	17.07		469	507	
						15.10	15.86	14.61%	469	428	-2.13%
						15.10	18.99		469	442	
	Y-390 B1	23.5241	23.5929	0.292%	N/C	18.24	19.99		473	493	
						18.24	19.77	1.48%	473	568	13.46%
						18.24	15.77		473	549	
	ER-610 C1	22.6079	22.6238	0.070%	N/C	14.53	14.26		494	304	
						14.53	12.60	-5.39%	494	347	-36.98%
						14.53	14.38		494	283	
	Y-833 D1	23.4045	23.4003	-0.018%	N/C	11.38	8.63		557	553	
						11.38	11.39	-23.73%	557	532	-1.08%
						11.38	6.02		557	568	
	923 E1	23.1189	23.1823	0.274%	N/C	15.85	11.12		503	574	
						15.85	18.10	-25.09%	503	553	14.84%
						15.85	6.40		503	606	
	ISO-800 F1	23.5525	23.6103	0.245%	N/C	14.75	16.97		632	585	
						14.75	19.87	27.71%	632	586	-5.33%
						14.75	19.67		632	624	
	HFC-134a/BRL-150 @ 260°F plus 24 hours @ 302°F(150°C)										
	U-475 A2	24.3352	24.3418	0.027%	N/C	15.10	11.25		469	559	
						15.10	15.00	-11.59%	469	520	-0.78%
						15.10	13.80		469	317	
	Y-390 B2	24.5380	24.5534	0.063%	N/C	18.24	17.53		473	420	
						18.24	15.00	-4.77%	473	529	9.44%
						18.24	19.74		473	604	
	ER-610 C2	23.2040	23.2079	0.017%	N/C	14.53	15.83		494	372	
						14.53	15.63	1.95%	494	365	-33.40%
						14.53	12.98		494	250	
	Y-833 D2	21.9467	21.9446	-0.010%	N/C	11.38	10.13		557	551	
						11.38	9.51	-9.46%	557	561	0.42%
						11.38	11.27		557	566	
	923 E2	23.4690	23.4922	0.099%	N/C	15.85	cracked		503	577	
						15.85	17.49	-30.57%	503	570	14.65%
						15.85	4.52		503	583	
	ISO-800 F2	23.2748	23.3535	0.338%	N/C	14.75	16.92		632	586	
						14.75	19.90	25.99%	632	564	-8.07%
						14.75	18.93		632	593	

HELICAL COILS/WIRE A---HFC-134a/Allied Signal BRL-150 @260°F(127°C)

	500 HRS in HFC-134a/BRL-150 @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POLYAMIDE IMIDE	U-475 A1	39.3660	39.4268	0.154%	N/C	73.73	61.55	-25.67%
						73.73	52.30	
						73.73	50.55	
	Y-390 B1	38.5783	38.6491	0.184%	N/C	43.78	22.60	-39.80%
						43.78	24.65	
						43.78	31.82	
	ER-610 C1	38.8476	38.9043	0.146%	N/C	51.81	53.82	5.78%
						51.81	51.30	
						51.81	59.30	
	Y-833 D1	38.6112	38.6071	-0.011%	N/C	9.85	23.72	51.68%
						9.85	8.50	
						9.85	12.60	
	923 E1	38.8878	38.9480	0.155%	N/C	41.28	35.97	-22.97%
						41.28	37.95	
						41.28	21.47	
	ISO-800 F1	38.1914	38.2617	0.184%	N/C	45.01	40.57	-14.00%
						45.01	36.85	
						45.01	53.50	
	500 HRS in HFC-134a/BRL-150 @ 260 F -> 24 HRS 302°F							
U-475 A2	39.7138	39.7288	0.038%	N/C	73.73	68.25	5.69%	
					73.73	77.85		
					73.73	78.00		
Y-390 B2	38.4229	38.4445	0.056%	N/C	43.78	42.00	-7.42%	
					43.78	44.00		
					43.78	35.60		
ER-610 C2	39.1308	39.1408	0.026%	N/C	51.81	56.45	19.18%	
					51.81	69.62		
					51.81	59.17		
Y-833 D2	38.7356	38.6863	-0.127%	N/C	9.85	22.30	127.31%	
					9.85	25.70		
					9.85	19.17		
923 E2	39.8696	39.8914	0.055%	N/C	41.28	43.60	-11.66%	
					41.28	33.95		
					41.28	31.85		
ISO-800 F2	38.6360	38.6720	0.093%	N/C	45.01	49.47	-2.68%	
					45.01	39.62		
					45.01	42.32		

HELICAL COILS/WIRE B-HFC-134a/BRL-150 Oil @ 260°F(1. 7°C)

500 HRS in HFC-134a/BRL-150 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER POPL Y A M I D E P O X Y G L A S S	U-475 A1	36.6171	36.7048	0.240%	N/C	40.14	35.40	-11.96%
						40.14	39.80	
						40.14	30.82	
	Y-390 B1	36.4814	36.5740	0.254%	N/C	36.12	50.10	40.61%
						36.12	51.20	
						36.12	51.07	
	ER-610 C1	36.3226	36.3970	0.205%	N/C	35.96	32.32	-13.11%
						35.96	30.75	
						35.96	30.67	
	Y-833 D1	36.6510	36.7068	0.152%	N/C	33.14	36.27	4.19%
						33.14	29.55	
						33.14	37.77	
	923 E1	39.1317	39.2026	0.181%	N/C	40.52	31.67	-5.49%
						40.52	35.75	
						40.52	47.47	
	ISO-800 F1	35.6736	35.7554	0.229%	N/C	20.20	21.02	3.28%
						20.20	17.20	
						20.20	24.37	
500 HRS in HFC-134a/BRL-150 @ 260 F -> 24 HRS 302°F								
I M I D E P O X Y G L A S S	U-475 A2	36.5662	36.5866	0.056%	N/C	40.14	34.47	-18.38%
						40.14	32.70	
						40.14	31.12	
	Y-390 B2	36.9481	36.9844	0.098%	N/C	36.12	47.25	23.22%
						36.12	45.17	
						36.12	41.10	
	ER-610 C2	36.1920	36.2086	0.046%	N/C	35.96	29.30	-11.61%
						35.96	32.20	
						35.96	33.85	
	Y-833 D2	36.6783	36.6425	-0.098%	N/C	33.14	26.15	-12.04%
						33.14	broken	
						33.14	32.15	
	923 E2	36.6622	36.6906	0.077%	N/C	40.52	32.75	-8.51%
						40.52	34.85	
						40.52	43.62	
	ISO-800 F2	36.9444	36.9774	0.089%	N/C	20.20	24.37	7.46%
						20.20	18.30	
						20.20	22.45	

HELICAL COILS/WIRE C-HFC-134a/Allied Signal BRL-150@ 260°F(127°C)

		500 HRS in HFC-134a/BRL-150 @ 260 F						
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER IMIDE POLYAMIDE	U-475 A1	37.9526	38.0108	0.153%	N/C	51.21	60.20	26.49%
						51.21	67.97	
						51.21	66.15	
	Y-390 B1	38.9743	39.0437	0.178%	N/C	50.72	25.60	-49.37%
						50.72	22.42	
						50.72	29.02	
	ER-610 C1	37.6709	37.7243	0.142%	N/C	58.33	55.30	-13.96%
						58.33	44.45	
						58.33	50.82	
	Y-833 D1	37.9496	37.8718	-0.205%	N/C	5.84	6.20	-8.39%
						5.84	3.60	
						5.84	6.25	
	923 E1	39.1020	39.1599	0.148%	N/C	49.26	25.35	-46.68%
						49.26	25.65	
						49.26	27.80	
	ISO-800 F1	38.5272	38.5866	0.154%	N/C	36.08	18.82	-48.43%
						36.08	18.60	
						36.08	18.40	
500 HRS in HFC-134a/BRL-150 @ 260 F-> 24 HRS 302°F								
U-475 A2	37.1429	37.1607	0.048%	N/C	51.21	69.82	35.97%	
					51.21	73.15		
					51.21	65.92		
Y-390 B2	40.1522	40.1783	0.065%	N/C	50.72	25.47	-36.15%	
					50.72	42.92		
					50.72	28.77		
ER-610 C2	38.3807	38.3940	0.035%	N/C	58.33	34.90	-29.92%	
					58.33	21.27		
					58.33	66.47		
Y-833 D2	37.5187	37.4287	-0.240%	N/C	5.84	22.97	220.43%	
					5.84	24.27		
					5.84	8.90		
923 E2	38.5192	38.5454	0.068%	N/C	49.26	28.82	-27.96%	
					49.26	40.42		
					49.26	37.22		
ISO-800 F2	39.1516	39.1744	0.058%	N/C	36.08	39.82	-27.95%	
					36.08	19.30		
					36.08	18.87		

SINGLE MAG WIRE WITHOUT VARNISH-HFC-134a/Allied Signal BRL-150 @ 260°F(127°C))

500 HRS in HFC-134a/BRL-150 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.8951	3.8969	0.046%	N/C	
					YES
B1	4.1159	4.1232	0.177%	N/C	
					YES
C1	3.8271	3.8289	0.047%	N/C	
					YES
500 HRS in HFC-134a/BRL-150 oil-> 302°F for 24 HRS					
A2	3.8069	3.8069	0.000%	N/C	
					YES
B2	3.9457	3.9477	0.051%	N/C	
					YES
C2	3.754	3.7545	0.013%	N/C	
					YES

500 HRS in HFC-134a/BRL-150 oil @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTERIMIDE	U-475 A1	4.2603	4.2660	0.134%	N/C	YES
	Y-390 B1	3.6452	3.6511	0.162%	N/C	NO
	ER-610 C1	3.6937	3.6952	0.041%	N/C	YES
	Y-833 D1	4.0431	4.0438	0.017%	N/C	YES
	923 E1	3.9196	3.9267	0.181%	N/C	NO
	ISO-800 F1	4.1193	4.1261	0.165%	N/C	NO
	HFC-134a/BRL-150 oil @ 260°F -> 24 HRS @ 302F					
	U-475 A2	4.2282	4.2292	0.024%	N/C	YES
	Y-390 B2	3.8449	3.8462	0.034%	N/C	NO
	ER-610 C2	3.7852	3.7852	0.000%	N/C	No
	Y-833 D2	4.0890	4.0824	-0.161%	N/C	YES
	923 E2	4.5686	4.5720	0.074%	N/C	NO
	ISO-800 F2	4.3090	4.3129	0.091%	N/C	NO

500 HRS in HFC-134a/BRL-150 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIMIDE	U-475 A1	4.4283	4.4346	0.142%	N/C	YES
	Y-390 B1	3.7584	3.7679	0.253%	N/C	NO
	ER-610 C1	4.2589	4.2617	0.066%	N/C	NO
	Y-833 D1	3.8516	3.8531	0.039%	N/C	YES
	923 E1	4.4867	4.4927	0.134%	N/C	NO
	ISO-800 F1	4.3251	4.3324	0.169%	N/C	NO
	HFC-134a/BRL-150 oil -> 24 HRS @ 302°F					
	U-475 A2	4.0640	4.0649	0.022%	N/C	YES
	Y-390 B2	3.9822	3.9837	0.038%	N/C	NO
	ER-610 C2	3.5960	3.5964	0.011%	N/C	NO
	Y-833 D2	3.9388	3.9384	-0.010%	N/C	YES
	923 E2	4.3739	4.3763	0.055%	N/C	NO
	ISO-800 F2	4.2746	4.2787	0.096%	N/C	NO

Varnish Disks----HFC-134a/Allied Signal BRL-150 Oil

500 HRS IN R-134a/BRL-150 @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.8320	2.7994	-1.15%	Surface	N/C
				Cloudy	
				S. Warped	
Y-390 B1	1.7486	1.7225	1.49%	N/C	N/C
ER-610 C1	2.7223	2.7812	2.16%	N/C	N/C
Y-833 D1	3.0798	3.1426	2.04%	N/C	N/C
923 E1	2.0957	2.0746	-1.01%		N/C
				Warped	
ISO-800 F1	2.1930	2.1822	-0.49%	Slightly warped	N/C
R-134a/BRL-150 at --->24 hour at 302°F.					
U-475 A2	2.7819	2.7020	-2.87%	Surface	N/C
				Cloudy	
				Darkened	
Y-390 B2	2.2997	2.2288	-3.08%	Slightly warped	N/C
				Darkened	
ER-610 C2	3.0567	3.0368	-0.65%	Darkened	N/C
Y-833 D2	3.3808	3.3904	0.28%	Darkened	N/C
923 E2	2.1348	2.0711	-2.98%	Warped	
				Darkened	N/C
ISO-800 F2	2.0461	1.9896	-2.76%	slightly warped	N/C
				Darkened	

500 HRS in HFC-134a/BRL-150 Oil @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	4.2565	4.5722	7.42%	0.512	178.10	21	17.4	16.56	
				0.402	132.70	21	17.4	15.72	-10.60%
				0.400	120.80	21	17.4	14.38	
DA/MY/DA B1	4.6712	4.6765	0.11%	0.390	112.40	21	13.7	13.72	
				0.378	105.10	21	13.7	13.24	-2.09%
				0.402	112.10	21	13.7	13.28	
MYLAR MO C1	2.2688	2.2914	1.00%	0.407	65.65	10	21.7	16.13	
				0.336	51.10	10	21.7	15.21	-27.34%
				0.425	67.85	10	21.7	15.96	
NO 410 D1	2.0265	2.3099	13.98%	0.480	85.40	10	18.7	17.79	
				0.504	93.65	10	18.7	18.58	-2.35%
				0.518	95.35	10	18.7	18.41	
NO MI 418 E1	2.3971	2.8668	19.59%	0.516	31.95	10	7.5	6.19	
				0.490	31.75	10	7.5	6.48	-16.95%
				0.493	29.65	10	7.5	6.01	
MEL 228 F1	2.3656	2.3997	1.44%	0.460	76.10	10	21.7	16.54	
				0.418	69.40	10	21.7	16.60	-23.89%
				0.404	66.25	10	21.7	16.40	
500 HRS in HFC-134a/BRL-150 Oil @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	4.3750	4.4194	1.01%	0.393	127.30	21	17.4	15.42	
				0.416	155.10	21	17.4	17.75	-6.53%
				0.366	120.00	21	17.4	15.61	
DA/MY/DA B2	4.7905	4.7346	-1.17%	0.455	127.60	21	13.7	13.35	
				0.400	115.10	21	13.7	13.70	-0.94%
				0.356	102.10	21	13.7	13.66	
MYLAR MO C2	2.1513	2.1512	0.00%	0.470	81.25	10	21.7	17.29	
				0.400	67.20	10	21.7	16.80	-22.42%
				0.456	74.85	10	21.7	16.41	
NOMEX 410 D2	2.2885	2.3406	2.28%	0.566	112.40	10	18.7	19.86	
				0.508	103.80	10	18.7	20.43	7.18%
				0.555	110.10	10	18.7	19.84	
NO/MI 418 E2	2.3585	2.3762	0.75%	0.481	25.10	10	7.5	5.22	
				0.495	30.25	10	7.5	6.11	-22.41%
				0.496	30.40	10	7.5	6.13	
MEL 228 F2	2.3245	2.3259	0.06%	0.462	77.05	10	21.7	16.68	
				0.393	66.40	10	21.7	16.90	-22.70%
				0.461	77.20	10	21.7	16.75	

500 HRS in HFC-134a/BRL-150 Oil @ 260 F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A1	0.56	14.0%	20.0%		>18.97	flash		N/C
	0.40	10.0%	20.0%	-40.0%	>18.97	flash	flash	
	0.37	9.3%	20.0%		>18.97	flash		
DA/MY/DA B1	0.50	25.0%	46.0%		>15.27	flash		Yellowed slightly warped
	0.48	24.0%	46.0%	-48.9%	>15.27	flash	flash	
	0.43	21.5%	46.0%		>15.27	flash		
MYLAR MO C1	0.89	44.5%	131.0%		>14.91	flash		lightened
	0.68	34.0%	131.0%	-69.0%	>14.91	flash	flash	
	0.87	43.5%	131.0%		>14.91	flash		
NO 410 D1	0.29	14.5%	17.0%		10.67	flash		N/C
	0.35	8.8%	17.0%	-37.7%	10.67	flash	flash	
	0.34	8.5%	17.0%		10.67	flash		
NO MI 418 E1	0.04	1.0%	4.0%		10.23	9.32		N/C
	0.05	1.3%	4.0%	-72.9%	10.23	10.00	-1.9%	
	0.04	1.0%	4.0%		10.23	10.80		
MEL 228 F1	2.75	137.5%	160.0%		>14.22	flash		slightly darkened
	3.07	153.5%	160.0%	-13.3%	>14.22	flash	flash	
	2.50	125.0%	160.0%		>14.22	flash		
500 HRS in HFC-134a/BRL-150 Oil @ 260 F ->24 HRS @ 302°F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A2	0.55	13.8%	20.0%		>18.97	flash		Delamination big pockets
	0.62	15.5%	20.0%	-39.6%	>18.97	flash	flash	
	0.28	7.0%	20.0%		>18.97	flash		
DA/MY/DA B2	0.38	19.0%	46.0%		>15.27	flash		Browned slightly warped
	0.45	22.5%	46.0%	-54.3%	>15.27	flash	flash	
	0.43	21.5%	46.0%		>15.27	flash		
MYLAR MO C2	0.60	30.0%	131.0%		>14.91	flash		N/C
	0.95	47.5%	131.0%	-63.1%	>14.91	flash	flash	
	1.35	67.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.33	8.3%	17.0%		10.67	9.79		slightly Darkened
	0.47	11.8%	17.0%	-39.7%	10.67	10.13	-4.6%	
	0.43	10.8%	17.0%		10.67	10.62		
NO/MI 418 E2	0.03	0.8%	4.0%		10.23	9.36		N/C
	0.04	1.0%	4.0%	-77.1%	10.23	9.61	-3.7%	
	0.04	1.0%	4.0%		10.23	10.57		
MEL 228 F2	2.82	141.0%	160.0%		>14.22	flash		Browned darkened
	3.40	170.0%	160.0%	-4.1%	>14.22	flash	flash	
	2.99	149.5%	160.0%		>14.22	flash		

500 HRS in HFC-134a/BRL-150 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5235	0.5991	14.44%	N/C
B1 MYLAR	0.4937	0.5031	1.90%	small Pockets when rubbed between fingers tube bacame cloudy in appearance
C1 NO/MY	0.3833	0.4043	5.48%	some small pockets
HFC-134a/BRL-150 oil @ 260°F plus 24 hrs @ 302°F				
A2 NOMEX	0.5267	0.5440	3.28%	Slightly Darkened
B2 MYLAR	0.4601	0.4605	0.09%	Big pockets warped Darkened
C2 NO/MY	0.3929	0.3939	0.25%	Nomex delaminated from mylar some pockets where mylar pulled away.

500 HRS in HFC-134a/BRL-150 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.4811	1.4832	0.14%	39.02	66.57		0.08	4.00%	N/C
				39.02	51.65	38.28%	0.06	3.00%	
				39.02	43.65		0.06	3.00%	
B1 Polyester	0.7040	0.7083	0.61%	56.12	57.70		0.62	31.00%	N/C
				56.12	58.15	3.65%	0.65	32.50%	
				56.12	58.65		0.70	35.00%	
C1 Permacel	1.5619	1.9732	26.33%	83.50	63.30		0.14	7.00%	Slightly
				88.50	85.20	-21.68%	0.14	7.00%	darkened
				88.50	59.45		0.12	6.00%	Curled up
500 HRS in HFC-134a/BRL-150 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.4762	1.4758	-0.03%	39.02	66.60		0.07	3.50%	N/C
				39.02	58.20	65.51%	0.06	3.00%	
				39.02	68.95		0.07	3.50%	
B2 Polyester	0.6662	0.6668	0.09%	56.12	56.80		0.45	22.50%	N/C
				56.12	56.55	1.36%	0.53	26.50%	
				56.12	57.30		0.58	29.00%	
C2 Permacel	1.3299	1.2823	-3.58%	88.50	66.35		0.07	3.50%	Slightly
				88.50	87.75	-2.37%	0.10	5.00%	Darkened
				88.50	105.10		0.12	6.00%	

TIE CORD--HFC-134a/Allied Signal BRL-150 oil @ 260°F(127°C)

500 HRS IN R-134a/BRL-150 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.2935	0.2948	0.44%	N/C	28.36	36.15		0.17	8.5%
					28.36	36.75	29.55%	0.16	8.0%
					28.36	37.32		0.19	9.5%
500 HRS IN R-134a/BRL-150 -> 24 HRS @ 302°F									
A2	0.2940	0.2924	-0.544%	N/C	28.36	40.05		0.48	24.0%
					28.36	39.00	37.75%	0.42	21.0%
					28.36	38.15		0.44	22.0%

LEAD WIRE INSULATION-HFC-134a/Allied Signal BRL-150 @ 260°F(127°C)

500 HRS IN HFC-134a/BRL-150 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.1841	4.3643	4.31%	N/C	9.61	9.03	
A1					9.61	10.10	0.80%
					9.61	9.93	
DTMD	4.4807	4.6371	3.49%	N/C	9.95	12.63	
B1					9.95	12.74	29.51%
					9.95	13.29	
HFC-134a/BRL-150 @ 260°F -> 24 HRS @ 302°F							
DMD	4.0540	4.1041	1.24%	N/C	9.61	8.59	
A2					9.61	9.54	-5.62%
					9.61	9.08	
DTMD	4.3707	4.3899	0.44%	N/C	9.95	11.22	
B2					9.95	9.70	2.95%
					9.95	9.81	

Appendix Q

**Experimental Data for HFC-125/Allied
Signal BRL-150 Exposure at 126°C(260°F)**

TWISTED PAIRS WITHOUT VARNISH-HFC-R125/Allied Signal BRL-150 oil @260°F(127°C)

500 hours in HFC-R125/BRL-150 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	22.8116	22.8259	0.063%	N/C	576	553		15.80	14.61	
					576	408	-11.6%	15.80	14.50	-8.6%
					576	567		15.80	14.20	
B1	21.8079	21.8574	0.227%	N/C	736	736		11.62	11.09	
					736	642	-4.4%	11.62	11.45	-7.0%
					736	732		11.62	9.87	
C1	22.8212	22.8329	0.051%	N/C	579	572		16.58	16.91	
					579	566	-10.8%	16.58	12.81	-17.8%
					579	412		16.58	11.16	
500 hours in HFC-R125/BRL-150 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	22.7902	22.8012	0.048%	N/C	576	481		15.80	15.90	
					576	496	-16.7%	15.80	13.49	-11.2%
					576	462		15.80	12.69	
B2	25.1673	25.1925	0.100%	N/C	736	731		11.62	11.31	
					736	724	-1.1%	11.62	11.71	0.0%
					736	728		11.62	11.84	
C2	22.7738	22.7808	0.031%	N/C	579	561		16.58	8.48	
					579	449	-17.0%	16.58	14.42	-26.5%
					579	432		16.58	13.64	

TWISTED PAIRS/WIRE A/WITH VARNISH-HFC-R125/Allied Signal BRL-150oil @260°F(127°C)

500 hours in HFC-125/BRL-150 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE	U-475 A1	24.3243	24.3585	0.141%	N/C	16.24	18.20		430	464	
						16.24	16.90	12.73%	430	518	21.94%
						16.24	19.82		430	591	
	Y-390 B1	24.3066	24.3623	0.229%	N/C	18.77	16.77		510	375	
						18.77	19.75	-2.59%	510	411	-15.56%
						18.77	18.33		510	506	
	ER-610 C1	21.9487	21.9636	0.068%	N/C	15.57	7.89		442	397	
						15.57	11.96	-34.10%	442	302	-25.34%
						15.57	10.93		442	291	
	Y-833 D1	23.6182	23.6226	0.019%	N/C	12.04	12.61		578	552	
						12.04	12.73	4.87%	578	409	-15.86%
						12.04	12.54		578	498	
	923 E1	24.5830	24.6314	0.197%	N/C	16.76	19.88		606	556	
						16.76	19.98	18.97%	606	451	-14.41%
						16.76	19.96		606	549	
	ISO-800 F1	23.3846	23.4350	0.216%	N/C	19.08	17.40		580	577	
						19.08	14.06	-18.66%	580	520	-4.20%
						19.08	15.10		580	570	
500 hours in HFC-R125/BRL-150 oil @ 260°F(127°C) plus 24 hours @ 3											
MID E	U-475 A2	24.1497	24.1725	0.094%	N/C	16.24	18.10		430	594	
						16.24	19.77	17.98%	430	415	13.49%
						16.24	19.61		430	455	
	Y-390 B2	28.1599	28.1860	0.093%	N/C	18.77	19.34		510	592	
						18.77	18.92	3.29%	510	545	10.00%
						18.77	19.90		510	546	
	ER-610 C2	21.7579	21.7671	0.042%	N/C	15.57	11.43		442	374	
						15.57	11.85	-31.06%	442	299	-28.81%
						15.57	8.92		442	271	
	Y-833 D2	23.1894	23.1826	-0.029%	N/C	12.04	11.37		578	507	
						12.04	9.90	-13.73%	578	531	-13.61%
						12.04	9.89		578	460	
	923 E2	24.3759	24.4130	0.152%	N/C	16.76	19.01		606	449	
						16.76	17.86	9.65%	606	490	-24.81%
						16.76	18.26		606	428	
	ISO-800 F2	23.4214	23.4428	0.091%	N/C	19.08	16.03		580	484	
						19.08	13.76	-16.84%	580	438	-19.48%
						19.08	17.81		580	479	

500 HOURS in HFC-R125/BRL-150 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	WT% Change	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POPLAR MIDLAND EIP OXLEY GLASS	U-475 A1	24.8195	24.8742	0.22%	N/C	13.32	13.64		746	737	
						13.32	11.48	-1.45%	746	732	-1.03%
						13.32	14.26		746	746	
	Y-390 B1	25.8913	25.9593	0.26%	N/C	12.28	12.96		755	749	
						12.28	11.17	0.14%	755	744	-1.41%
						12.28	12.76		755	740	
	ER-610 C1	25.6699	25.7186	0.19%	N/C	12.73	13.63		734	731	
						12.73	13.97	5.42%	734	732	-0.27%
						12.73	12.66		734	733	
	Y-833 D1	25.0877	25.1409	0.21%	N/C	12.49	11.88		734	736	
						12.49	12.94	-0.77%	734	735	-0.05%
						12.49	12.36		734	730	
	923 E1	26.3431	26.4180	0.28%	N/C	14.38	15.40		742	744	
						14.38	14.27	0.83%	742	747	0.49%
						14.38	13.83		742	746	
	ISO-800 F1	25.2707	25.3738	0.41%	N/C	12.29	13.60		747	741	
						12.29	12.69	10.09%	747	750	-0.62%
						12.29	14.30		747	736	
HFC-R125/BRL-150 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
POLYESTER POPLAR MIDLAND EIP OXLEY GLASS	U-475 A2	25.2418	25.2632	0.08%	N/C	13.32	11.97		746	738	
						13.32	12.14	-17.74%	746	744	-1.25%
						13.32	8.76		746	728	
	Y-390 B2	25.0435	25.0835	0.16%	N/C	12.28	11.33		755	732	
						12.28	13.94	15.66%	755	735	-2.85%
						12.28	17.34		755	742	
	ER-610 C2	26.0435	26.0692	0.10%	N/C	12.73	12.90		734	727	
						12.73	12.43	-1.34%	734	729	-0.73%
						12.73	12.35		734	730	
	Y-833 D2	25.7267	25.7315	0.02%	N/C	12.49	12.31		734	728	
						12.49	11.40	-5.63%	734	729	-0.64%
						12.49	11.65		734	731	
	923 E2	26.4859	26.5267	0.15%	N/C	14.38	11.73		742	748	
						14.38	14.57	-7.51%	742	746	0.81%
						14.38	13.60		742	751	
	ISO-800 F2	25.6626	25.7225	0.23%		12.29	11.65		747	735	
					N/C	12.29	10.12	-10.36%	747	727	-2.14%
						12.29	11.28		747	741	

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-R125/Allied Signal BRL-150 @ 260°F(127°C)

500 Hours in HFC-R125/BRL-150 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE POLYAMIDEIMIDE	U-475 A1	23.7930	23.8273	0.144%	N/C	15.10	18.52		469	558	
						15.10	17.92	5.47%	469	483	4.83%
						15.10	11.34		469	434	
	Y-390 B1	23.0749	23.1338	0.255%	N/C	18.24	19.99		473	544	
						18.24	18.00	5.35%	473	517	7.40%
						18.24	19.66		473	463	
	ER-610 C1	22.8442	22.8616	0.076%	N/C	14.53	14.16		494	312	
						14.53	17.20	0.62%	494	362	-35.49%
						14.53	12.50		494	282	
	Y-833 D1	23.7411	23.7530	0.050%	N/C	11.38	15.38		557	577	
						11.38	17.50	28.21%	557	566	2.57%
						11.38	10.89		557	571	
	923 E1	24.0788	24.1338	0.228%	N/C	15.85	13.79		503	567	
						15.85	19.54	10.05%	503	553	11.99%
						15.85	19.00		503	570	
	ISO-800 F1	23.4707	23.5220	0.219%	N/C	14.75	19.07		632	466	
						14.75	17.60	9.08%	632	520	-16.82%
						14.75	11.60		632	591	
	HFC-R125/BRL-150 @ 260°F plus 24 hours @ 302°F(150°C)										
	U-475 A2	23.5044	23.5190	0.062%	N/C	15.10	14.84		469	285	
						15.10	13.70	-8.96%	469	328	-26.65%
						15.10	12.70		469	419	
	Y-390 B2	23.3471	23.3655	0.079%	N/C	18.24	19.94		473	586	
						18.24	15.66	-3.45%	473	561	19.66%
						18.24	19.56		473	551	
	ER-610 C2	22.2524	22.2522	-0.001%	N/C	14.53	10.10		494	333	
						14.53	13.73	-20.72%	494	319	-30.43%
						14.53	10.73		494	379	
	Y-833 D2	23.7026	23.7089	0.027%	N/C	11.38	12.81		557	424	
						11.38	16.50	28.78%	557	486	-21.72%
						11.38	Cracked		557	398	
	923 E2	23.8094	23.8330	0.099%	N/C	15.85	19.99		503	525	
						15.85	17.57	20.86%	503	590	12.99%
						15.85	19.91		503	590	
	ISO-800 F2	23.5524	23.5932	0.173%	N/C	14.75	19.50		632	576	
						14.75	16.87	15.05%	632	397	-18.57%
						14.75	14.54		632	571	

HELICAL COILS/WIRE A---HFC-125/Allied Signal BRL-150 @260°F(127°C)

	500 HRS in HFC-R125/BRL-150 @ 260 F							
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER	U-475 A1	38.6963	38.7547	0.151%	N/C	73.73	84.20	-2.00%
						73.73	68.07	
						73.73	64.50	
	Y-390 B1	39.1748	39.2402	0.167%	N/C	43.78	73.10	56.92%
						43.78	72.80	
						43.78	60.20	
	ER-610 C1	38.6652	38.7144	0.127%	N/C	51.81	51.02	9.91%
						51.81	63.62	
						51.81	56.20	
	Y-833 D1	39.9018	39.9057	0.010%	N/C	9.85	21.20	141.18%
						9.85	24.92	
						9.85	25.15	
923 E1	38.9333	38.9790	0.117%	N/C	41.28	40.70	-3.50%	
					41.28	39.65		
					41.28	39.15		
ISO-800 F1	37.8805	37.9465	0.174%	N/C	45.01	36.25	-1.52%	
					45.01	52.40		
					45.01	46.12		
	500 HRS in HFC-R125/BRL-150 @ 260 F -> 24 HRS 302°F							
POLYAMIDE	U-475 A2	37.6998	37.7191	0.051%	N/C	73.73	55.62	-7.20%
						73.73	70.67	
						73.73	66.17	
	Y-390 B2	39.5512	39.5842	0.083%	N/C	43.78	43.10	37.71%
						43.78	69.05	
						43.78	68.72	
	ER-610 C2	39.8899	39.9057	0.040%	N/C	51.81	61.90	27.03%
						51.81	64.42	
						51.81	71.12	
	Y-833 D2	38.3237	38.3090	-0.038%	N/C	9.85	18.22	234.89%
						9.85	28.72	
						9.85	52.02	
923 E2	38.6121	38.6344	0.058%	N/C	41.28	35.45	-18.41%	
					41.28	31.42		
					41.28	34.17		
ISO-800 F2	38.0310	38.0682	0.098%	N/C	45.01	37.10	-22.08%	
					45.01	20.47		
					45.01	47.65		

HELICAL COILS/WIRE B-HFC-R125/BRL-150 Oil @ 260°F(127°C)

500 HRS in HFC-R125/BRL-150 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
P O L Y E S T E R	U-475 A1	38.5498	38.6311	0.211%	N/C	40.14	48.65	22.90%
						40.14	44.40	
						40.14	54.95	
	Y-390 B1	37.0896	38.2100	3.021%	N/C	36.12	55.77	51.60%
						36.12	56.75	
						36.12	51.75	
	ER-610 C1	35.8755	35.9387	0.176%	N/C	35.96	40.52	13.47%
						35.96	41.47	
						35.96	40.42	
P O L Y A M I D E	Y-833 D1	36.3635	36.3653	0.005%	N/C	33.14	44.02	30.55%
						33.14	46.67	
						33.14	39.10	
	923 E1	37.5372	37.6098	0.193%	N/C	40.52	47.45	23.58%
						40.52	51.92	
						40.52	50.85	
	ISO-800 F1	36.2650	36.3384	0.202%	N/C	20.20	29.65	35.97%
						20.20	26.70	
						20.20	26.05	
500 HRS in HFC-R125/BRL-150 @ 260 F -> 24 HRS 302°F								
I M I D E	U-475 A2	37.1537	37.1893	0.096%	N/C	40.14	38.32	-3.64%
						40.14	30.95	
						40.14	46.77	
	Y-390 B2	38.1205	37.1254	-2.610%	N/C	36.12	45.80	38.68%
						36.12	52.40	
						36.12	52.07	
E P O X Y	ER-610 C2	37.0030	37.0265	0.064%	N/C	35.96	34.40	-8.31%
						35.96	31.62	
						35.96	32.90	
	Y-833 D2	35.4334	35.4222	-0.032%	N/C	33.14	29.25	0.45%
						33.14	39.57	
						33.14	31.05	
G L A S S	923 E2	36.9497	36.9787	0.078%	N/C	40.52	36.12	0.95%
						40.52	39.05	
						40.52	47.55	
	ISO-800 F2	36.1693	36.1998	0.084%	N/C	20.20	21.65	4.90%
						20.20	22.22	
						20.20	19.70	

HELICAL COILS/WIRE C-HFC-R125/Allied Signal BRL-150@ 260°F(127°C)

500 HRS in HFC-R125/BRL-150 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTERIMIDE POLYAMIDEIMIDE	U-475 A1	38.8294	38.8911	0.159%	N/C	51.21	68.32	31.76%
						51.21	73.35	
						51.21	60.75	
	Y-390 B1	40.2661	40.3406	0.185%	N/C	50.72	54.52	-6.26%
						50.72	43.35	
						50.72	44.77	
	ER-610 C1	38.5631	38.6155	0.136%	N/C	58.33	76.22	21.29%
						58.33	73.92	
						58.33	62.10	
	Y-833 D1	37.2576	37.2791	0.058%	N/C	5.84	26.22	432.19%
						5.84	38.65	
						5.84	28.37	
	923 E1	39.0369	39.0866	0.127%	N/C	49.26	27.75	-43.21%
						49.26	28.90	
						49.26	27.27	
	ISO-800 F1	39.2795	39.3536	0.189%	N/C	36.08	59.70	54.54%
						36.08	61.00	
						36.08	46.57	
500 HRS in HFC-R125/BRL-150 @ 260 F-> 24 HRS 302°F								
U-475 A2	35.9312	35.9583	0.075%	N/C	51.21	61.67	20.37%	
					51.21	63.15		
					51.21	60.10		
Y-390 B2	38.3756	38.4103	0.090%	N/C	50.72	57.12	-2.00%	
					50.72	50.67		
					50.72	41.32		
ER-610 C2	40.0733	40.0964	0.058%	N/C	58.33	75.80	17.04%	
					58.33	78.05		
					58.33	50.95		
Y-833 D2	37.4496	37.4640	0.038%	N/C	5.84	24.72	366.27%	
					5.84	35.35		
					5.84	21.62		
923 E2	38.2843	38.3075	0.061%	N/C	49.26	29.15	-39.83%	
					49.26	30.90		
					49.26	28.87		
ISO-800 F2	37.1101	37.1396	0.079%	N/C	36.08	42.65	10.70%	
					36.08	20.90		
					36.08	56.27		

SINGLE MAG WIRE WITHOUT VARNISH-HFC-R125/Allied Signal BRL-150 @ 260°F(127°C))

500 HRS in HFC-R125/BRL-150 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.7172	3.719	0.048%	N/C	
					YES
B1	3.7608	3.7671	0.168%	N/C	
					YES
C1	3.5924	3.5941	0.047%	N/C	
					YES
500 HRS in HFC-R125/BRL-150 oil-> 302°F for 24 HRS					
A2	3.6589	3.6597	0.022%	N/C	
					YES
B2	3.4408	3.444	0.093%	N/C	
					YES
C2	3.3865	3.3876	0.032%	N/C	
					YES

SINGLE/WIRE A/WITH VARNISH--HFC-R125/Allied Signal BRL-150 @ 260°F(127°C)

500 HRS in HFC-R125/BRL-150 oil @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTERIMIDE POLYAMIDE	U-475 A1	4.1421	4.1457	0.087%	N/C	YES
	Y-390 B1	4.0809	4.0850	0.100%	N/C	NO
	ER-610 C1	3.8701	3.8704	0.008%	N/C	NO
	Y-833 D1	4.1761	4.1761	0.000%	N/C	YES
	923 E1	4.3804	4.3854	0.114%	N/C	NO
	ISO-800 F1	4.3287	4.3355	0.157%	N/C	NO
	HFC-R125/BRL-150 oil @ 260°F -> 24 HRS @ 302F					
	U-475 A2	4.2042	4.2049	0.017%	N/C	NO
	Y-390 B2	4.2297	4.2316	0.045%	N/C	NO
	ER-610 C2	3.7606	3.7597	-0.024%	N/C	YES
	Y-833 D2	4.0331	4.0320	-0.027%	N/C	YES
	923 E2	4.6092	4.6125	0.072%	N/C	NO
	ISO-800 F2	4.2026	4.2064	0.090%	N/C	NO

SINGLE/WIRE B/WITH VARNISH--HFC-R125/Allied Signal BRL-150 oil @ 260°F(127°C)

		500 HRS in HFC-R125/BRL-150 Oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX		
P O L Y E S T E R	U-475 A1	4.3493	4.3575	0.189%	N/C			
						NO		
	Y-390 B1	4.4532	4.4720	0.422%	N/C			
						NO		
	ER-610 C1	4.1485	4.1536	0.123%	N/C			
						NO		
P O L Y A M I D E	Y-833 D1	4.2299	4.2350	0.121%	N/C			
						NO		
	923 E1	3.8342	3.8409	0.175%	N/C			
						NO		
	ISO-800 F1	3.2642	3.2695	0.162%	N/C			
						NO		
	HFC-R125/BRL-150 500 hr exp. plus 24 hrs.@302°F							
I M I D E	U-475 A2	4.3131	4.3164	0.077%	N/C			
						NO		
	Y-390 B2	4.4353	4.4400	0.106%	N/C			
						NO		
	ER-610 C2	4.3174	4.3190	0.037%	N/C			
						YES		
E P O X Y	Y-833 D2	4.2015	4.2046	0.074%	N/C			
						YES		
G L A S S	923 E2	4.2143	4.2190	0.112%	N/C			
						NO		
	ISO-800 F2	3.4147	3.4177	0.088%	N/C			
						NO		

SINGLE/WIRE C/WITH VARNISH--HFC-R125/ALLIED SIGNAL BRL-150 oil 260°F(127°C)

500 HRS in HFC-R125/BRL-150 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE IMIDE	U-475 A1	4.1818	4.1859	0.098%	N/C	NO
	Y-390 B1	4.4765	4.4814	0.109%	N/C	NO
	ER-610 C1	3.5126	3.5141	0.043%	N/C	NO
	Y-833 D1	3.8208	3.8218	0.026%	N/C	YES
	923 E1	4.4039	4.4110	0.161%	N/C	NO
	ISO-800 F1	4.3435	4.3481	0.106%	N/C	NO
	HFC-R125/BRL-150 oil -> 24 HRS @ 302°F					
	U-475 A2	4.3056	4.3063	0.016%	N/C	NO
	Y-390 B2	4.3916	4.3931	0.034%	N/C	NO
	ER-610 C2	3.3713	3.3725	0.036%	N/C	NO
	Y-833 D2	4.1761	4.1763	0.005%	N/C	NO
	923 E2	4.0709	4.0734	0.061%	N/C	NO
	ISO-800 F2	4.3064	4.3106	0.098%	N/C	NO

Varnish Disks----HFC-R125/Allied Signal BRL-150 Oil

500 HRS IN R125/BRL-150 @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	3.1403	3.1608	0.65%	Surface	N/C
				Cloudy	
				S. Warped	
Y-390 B1	2.9379	3.0191	2.76%	N/C	N/C
ER-610 C1	2.3721	2.4645	3.90%	N/C	N/C
Y-833 D1	3.2340	3.3694	4.19%	N/C	N/C
923 E1	3.1078	3.1894	2.63%		N/C
				Warped	
ISO-800 F1	1.6159	1.6402	1.50%	Slightly warped	N/C
R125/BRL-150 at --->24 hour at 302°F.					
U-475 A2	2.5539	2.5083	-1.79%	Surface	N/C
				Cloudy	
				Darkened	
Y-390 B2	2.6137	2.6490	1.35%	Slightly warped	N/C
				Darkened	
ER-610 C2	2.4751	2.4911	0.65%	Darkened	N/C
Y-833 D2	2.9479	2.9441	-0.13%	Darkened	N/C
				Some Pockets	
923 E2	2.2108	2.2341	1.05%	Warped	
				Darkened	N/C
ISO-800 F2	1.8138	1.7934	-1.12%	slightly warped	N/C
				Darkened	

SHEET INSULATION-HFC-R125/Allied Signal BRL-150 oil @ 260°F(127°C)

500 HRS in HFC-R125/BRL-150 Oil @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	% CHANGE TENSILE
NO/MY/NO A1	4.8268	5.1964	7.66%	0.711	246.20	21	17.4	16.49	
				0.613	190.70	21	17.4	14.81	-11.14%
				0.651	206.20	21	17.4	15.08	
DA/MY/DA B1	4.7849	4.8810	2.01%	0.374	99.30	21	13.7	12.64	
				0.380	113.20	21	13.7	14.19	-6.91%
				0.361	86.65	21	13.7	11.43	
MYLAR MO C1	2.2637	2.3271	2.80%	0.432	71.20	10	21.7	16.48	
				0.453	78.95	10	21.7	17.43	-22.19%
				0.442	74.00	10	21.7	16.74	
NO 410 D1	2.3887	2.7257	14.11%	0.597	106.70	10	18.7	17.87	
				0.399	52.12	10	18.7	13.06	-11.59%
				0.422	78.75	10	18.7	18.66	
NO MI 418 E1	2.1997	2.7361	24.39%	0.530	29.25	9	7.5	6.13	
				0.508	29.00	9	7.5	6.34	-15.79%
				0.509	29.65	9	7.5	6.47	
MEL 228 F1	2.8250	2.9133	3.13%	0.410	lost	10	21.7		
				0.540	73.80	10	21.7	13.67	-27.76%
				0.490	86.65	10	21.7	17.68	
500 HRS in HFC-R125/BRL-150 Oil @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	5.1955	5.2968	1.95%	0.578	102.30	21	17.4	8.43	
				0.537	102.30	21	17.4	9.07	-52.36%
				0.661	102.30	21	17.4	7.37	
DA/MY/DA B2	4.7094	4.6673	-0.89%	0.347	97.60	21	13.7	13.39	
				0.407	102.30	21	13.7	11.97	-6.93%
				0.378	102.30	21	13.7	12.89	
MYLAR MO C2	2.1826	2.1783	-0.20%	0.435	74.62	9	21.7	19.06	
				0.467	79.80	9	21.7	18.99	-11.55%
				0.388	68.22	9	21.7	19.54	
NOMEX 410 D2	2.2779	2.3669	3.91%	0.440	89.17	10	18.7	20.27	
				0.500	96.85	10	18.7	19.37	3.44%
				0.527	96.95	10	18.7	18.40	
NO/MI 418 E2	2.4057	2.4422	1.52%	0.527	31.35	10	7.5	5.95	
				0.475	24.85	10	7.5	5.23	-25.03%
				0.458	26.05	10	7.5	5.69	
MEL 228 F2	2.7661	2.7734	0.26%	0.525	88.80	10	21.7	16.91	
				0.342	59.67	10	21.7	17.45	-22.90%
				0.423	66.97	10	21.7	15.83	

SHEET INSULATION-HFC-R125/Allied Signal BRL-150 oil @ 260°F(127°C)

500 HRS in HFC-R125/BRL-150 Oil @ 260 F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A1	0.43	10.8%	20.0%		>18.97	flash		N/C
	0.35	8.8%	20.0%	-51.3%	>18.97	flash	flash	
	0.55	13.8%	20.0%		>18.97	flash		
DA/MY/DA B1	0.49	24.5%	46.0%		>15.27	flash		Yellowed slightly warped
	0.42	21.0%	46.0%	-55.8%	>15.27	flash	flash	
	0.31	15.5%	46.0%		>15.27	flash		
MYLAR MO C1	1.81	90.5%	131.0%		>14.91	flash		N/C
	2.39	119.5%	131.0%	-8.9%	>14.91	flash	flash	
	2.96	148.0%	131.0%		>14.91	flash		
NO 410 D1	0.38	19.0%	17.0%		10.67	13.69		N/C
	0.18	4.5%	17.0%	-32.4%	10.67	13.70	28.7%	
	0.44	11.0%	17.0%		10.67	13.82		
NO MI 418 E1	0.05	1.3%	4.0%		10.23	10.36		N/C
	0.04	1.0%	4.0%	-68.8%	10.23	11.50	1.7%	
	0.06	1.5%	4.0%		10.23	9.36		
MEL 228 F1	3.54	177.0%	160.0%		>14.22	flash		slightly darkened
	1.39	69.5%	160.0%	-23.0%	>14.22	flash	flash	
			160.0%		>14.22	flash		
500 HRS in HFC-R125/BRL-150 Oil @ 260 F ->24 HRS @ 302°F								VISUAL EXP
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	
NO/MY/NO A2	0.11	2.8%	20.0%		>18.97	flash		Delamination big pockets
	0.15	3.8%	20.0%	-69.2%	>18.97	flash	flash	
	0.48	12.0%	20.0%		>18.97	flash		
DA/MY/DA B2	0.55	27.5%	46.0%		>15.27	flash		Browned slightly warped
	0.55	27.5%	46.0%	-40.6%	>15.27	flash	flash	
	0.54	27.0%	46.0%		>15.27	flash		
MYLAR MO C2	2.87	143.5%	131.0%		>14.91	flash		N/C
	2.42	121.0%	131.0%	3.1%	>14.91	flash	flash	
	2.81	140.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.51	12.8%	17.0%		10.67	6.93		slightly Darkened
	0.43	10.8%	17.0%	-36.8%	10.67	10.86	-22.6%	
	0.35	8.8%	17.0%		10.67	6.99		
NO/MI 418 E2	0.04	1.0%	4.0%		10.23	11.19		N/C
	0.03	0.8%	4.0%	-77.1%	10.23	9.29	1.2%	
	0.04	1.0%	4.0%		10.23	10.59		
MEL 228 F2	0.13	6.5%	160.0%		>14.22	flash		browned darkened
	3.01	150.5%	160.0%	-65.9%	>14.22	flash	flash	
	0.13	6.5%	160.0%		>14.22	flash		

SLEEVING--HFC-R125/Allied Signal BRL-150 @ 260°F(127°C)

500 HRS in HFC-R125/BRL-150 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5445	0.6276	15.26%	N/C
B1 MYLAR	0.4931	0.5125	3.93%	small Pockets when rubbed between fingers tube bacame cloudy in appearance
C1 NO/MY	0.3966	0.4277	7.84%	some small pockets
HFC-R125/BRL-150 oil @ 260°F plus 24 hrs @ 302°F				
A2 NOMEX	0.5451	0.5753	5.54%	Slightly Darkened
B2 MYLAR	0.4451	0.4460	0.20%	Big pockets Darkened
C2 NO/MY	0.3922	0.3962	1.02%	Nomex delaminated from mylar some pockets where mylar pulled away.

500 HRS in HFC-134a/BRL-150 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.6620	1.6689	0.42%	39.02	66.57		0.08	4.00%	N/C
				39.02	51.65	38.28%	0.06	3.00%	
				39.02	43.65		0.06	3.00%	
B1 Polyester	0.7040	0.7083	0.61%	56.12	57.70		0.62	31.00%	N/C
				56.12	58.15	3.65%	0.65	32.50%	
				56.12	58.65		0.70	35.00%	
C1 Permacel	1.5619	1.9732	26.33%	88.50	63.30		0.14	7.00%	Slightly
				88.50	85.20	-21.68%	0.14	7.00%	darkened
				88.50	59.45		0.12	6.00%	Curled up
500 HRS in HFC-134a/BRL-150 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.4762	1.4758	-0.03%	39.02	66.60		0.07	3.50%	N/C
				39.02	58.20	65.51%	0.06	3.00%	
				39.02	68.95		0.07	3.50%	
B2 Polyester	0.6662	0.6668	0.09%	56.12	56.80		0.45	22.50%	N/C
				56.12	56.55	1.36%	0.53	26.50%	
				56.12	57.30		0.58	29.00%	
C2 Permacel	1.3299	1.2823	-3.58%	88.50	66.35		0.07	3.50%	Slightly
				88.50	87.75	-2.37%	0.10	5.00%	Darkened
				88.50	105.10		0.12	6.00%	

TIE CORD--HFC-R125/Allied Signal BRL-150 oil @ 260°F(127°C)

500 HRS IN R125/BRL-150 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.3063	0.3228	5.39%	N/C	28.36	34.20		0.45	22.5%
					28.36	30.65	13.72%	0.41	20.5%
					28.36	31.90		0.40	20.0%
500 HRS IN R125/BRL-150 -> 24 HRS @ 302°F									
A2	0.3345	0.3321	-0.72%	N/C	28.36	38.15		0.56	28.0%
					28.36	32.05	20.20%	0.54	27.0%
					28.36	32.07		0.44	22.0%

LEAD WIRE INSULATION-HFC-R125/Allied Signal BRL-150 @ 260°F(127°C)

500 HRS IN HFC-R125/BRL-150 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.4123	4.6555	5.51%	N/C	9.61	10.10	
A1					9.61	12.24	10.65%
					9.61	9.56	
DTMD	4.2983	4.4866	4.38%	N/C	9.95	14.52	
B1					9.95	14.46	41.94%
					9.95	13.39	
HFC-R125/BRL-150 @ 260°F -> 24 HRS @ 302°F							
DMD	4.5536	4.6624	2.39%	N/C	9.61	11.22	
A2					9.61	11.93	12.56%
					9.61	9.30	
DTMD	4.3389	4.3653	0.61%	N/C	9.95	8.83	
B2					9.95	9.40	-1.54%
					9.95	11.16	

Appendix R

Experimental Data for HFC-134a/Dow P-425 Exposure at 126°C(260°F)

TWISTED PAIRS WITHOUT VARNISH-HFC-134a/Dow P-425 oil @260°F(127°C)

500 hours in HFC-134a/Dow P-425 oil at 260°F(127°C)										
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE BRN OUT (AVE)	EXP BRN OUT	BRN OUT % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE
A1	30.1313	30.1467	0.051%	N/C	576	561		15.80	15.95	
					576	474	-12.2%	15.80	18.30	-0.2%
					576	483		15.80	13.05	
B1	22.6165	22.7138	0.430%	N/C	736	730		11.62	15.06	
					736	599	-6.7%	11.62	15.50	29.7%
					736	731		11.62	14.66	
C1	22.5881	22.6005	0.055%	N/C	579	468		16.58	13.81	
					579	462	-22.6%	16.58	12.34	-12.2%
					579	415		16.58	17.50	
500 hours in HFC-134a/Dow P-425 oil at 260°F(127°C) plus 24 hours at 302°F(150°C)										
A2	23.9251	23.9273	0.009%	N/C	576	469		15.80	11.43	
					576	511	-15.3%	15.80	8.78	-30.0%
					576	483		15.80	12.95	
B2	24.5775	24.5663	-0.046%	N/C	736	729		11.62	10.23	
					736	727	-1.1%	11.62	10.27	-6.8%
					736	727		11.62	11.98	
C2	23.037	23.0743	0.162%	N/C	579	525		16.58	12.13	
					579	456	-17.7%	16.58	13.50	-27.9%
					579	448		16.58	10.22	

TWISTED PAIRS/WIRE A/WITH VARNISH-HFC-134a/Dow P-425 oil @260°F(127°C)

500 hours in HFC-134a/P-425 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	Exp Pair weight	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MIDE	U-475 A1	22.3753	22.5070	0.589%	N/C	16.24	13.89		430	360	
						16.24	10.45	-24.34%	430	276	-25.19%
						16.24	12.52		430	329	
	Y-390 B1	24.2645	24.4484	0.758%	N/C	18.77	19.82		510	514	
						18.77	17.16	0.82%	510	550	2.68%
						18.77	19.79		510	507	
	ER-610 C1	22.9213	22.9534	0.140%	N/C	15.57	18.84		442	237	
						15.57	15.00	0.39%	442	387	-26.17%
						15.57	13.05		442	355	
	Y-833 D1	24.0166	24.0205	0.016%	N/C	12.04	15.00		578	453	
						12.04	12.49	7.00%	578	533	-14.53%
						12.04	11.16		578	496	
	923 E1	22.8226	22.8526	0.131%	N/C	16.76	17.54		606	584	
						16.76	19.19	3.68%	606	560	-6.88%
						16.76	15.40		606	549	
	ISO-800 F1	23.1660	23.2951	0.557%	N/C	19.08	17.70		580	490	
						19.08	19.83	0.17%	580	560	-7.07%
						19.08	19.81		580	567	
500 hours in HFC-134a/Dow P-425 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
IMIDE	U-475 A2	22.4074	22.4073	0.000%	N/C	16.24	13.28		430	558	
						16.24	12.26	-16.52%	430	380	1.32%
						16.24	15.13		430	369	
	Y-390 B2	24.9588	25.0520	0.373%	N/C	18.77	11.80		510	548	
						18.77	7.97	-50.70%	510	485	-2.55%
						18.77	7.99		510	458	
	ER-610 C2	22.6494	22.6559	0.029%	N/C	15.57	14.79		442	352	
						15.57	12.73	-19.44%	442	326	-24.43%
						15.57	10.11		442	324	
	Y-833 D2	21.9904	21.9745	-0.072%	N/C	12.04	10.77		578	552	
						12.04	10.66	-6.64%	578	489	-12.34%
						12.04	12.29		578	479	
	923 E2	23.1559	23.2145	0.253%	N/C	16.76	18.55		606	569	
						16.76	cracked	-8.38%	606	582	-3.69%
						16.76	12.16		606	600	
	ISO-800 F2	23.2842	23.2959	0.050%	N/C	19.08	14.54		580	591	
						19.08	14.30	-20.61%	580	577	0.69%
						19.08	16.60		580	584	

TWISTED PAIRS/WIRE B/WITH VARNISH -HFC-134a/Dow P-425 oil @260°F(127°C)

500 HOURS in HFC-134a/Dow P425 oil @ 260°F(127°C)											
	VARN	TWISTED PAIR WT	WT% Change	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTER POLYAMIDE MIDEX POLYESTER OXLEY GLASS	U-475 A1	26.2392	26.4183	0.68%	N/C	13.32	19.87		746	739	
						13.32	19.99	49.20%	746	738	-1.12%
						13.32	19.76		746	736	
	Y-390 B1	25.2938	25.4414	0.58%	N/C	12.28	19.52		755	734	
						12.28	19.90	60.56%	755	732	-2.87%
						12.28	19.73		755	734	
	ER-610 C1	26.0024	26.0958	0.36%	N/C	12.73	16.02		734	729	
						12.73	16.37	24.46%	734	731	-0.54%
						12.73	15.14		734	730	
	Y-833 D1	25.7868	25.8020	0.06%	N/C	12.49	13.88		734	728	
						12.49	15.20	14.20%	734	731	-0.64%
						12.49	13.71		734	729	
	923 E1	26.0802	26.3279	0.95%	N/C	14.38	15.84		742	749	
						14.38	16.37	8.74%	742	728	-0.63%
						14.38	14.70		742	735	
	ISO-800 F1	25.4189	25.6384	0.86%	N/C	12.29	15.52		747	728	
						12.29	18.07	38.38%	747	735	-1.61%
						12.29	17.43		747	742	
HFC-134a/Dow P-425 oil @ 260°F(127°C) plus 24 hours @ 302°F(150°C)											
POLYESTER OXLEY GLASS	U-475 A2	26.7264	26.7493	0.09%	N/C	13.32	12.46		746	735	
						13.32	13.01	-9.48%	746	735	-1.03%
						13.32	10.70		746	745	
	Y-390 B2	25.5947	25.6985	0.41%	N/C	12.28	11.37		755	746	
						12.28	11.62	-3.34%	755	743	-1.39%
						12.28	12.62		755	740	
	ER-610 C2	26.6207	26.6263	0.02%	N/C	12.73	12.29		734	729	
						12.73	12.85	-5.68%	734	732	-0.59%
						12.73	10.88		734	728	
	Y-833 D2	25.7958	25.7685	-0.11%	N/C	12.49	12.10		734	729	
						12.49	11.90	-3.68%	734	732	-0.64%
						12.49	12.09		734	727	
	923 E2	26.9501	27.0757	0.47%	N/C	14.38	11.67		742	752	
						14.38	11.23	-14.19%	742	745	1.35%
						14.38	14.12		742	742	
	ISO-800 F2	25.6914	25.7309	0.15%		12.29	10.47		747	733	
					N/C	12.29	9.40	-16.25%	747	745	-1.07%
						12.29	11.01		747	736	

TWISTED PAIRS/WIRE C/WITH VARNISH-HFC-134a/Dow P-425 @ 260°F(127°C)

500 Hours in HFC-134a/Dow P-425 @ 260°F(127°F)											
	VARN	TWISTED PAIR WT	EXPT PAIR WT	WT % CHANGE	EXP VIS	BASE DIE	EXP DIE	DIE % CHANGE	BASE BURN OUT	EXP BURN OUT	BRNOUT % CHANGE
POLYESTERIMIDE	U-475 A1	21.4712	21.5711	0.465%	N/C	15.10	19.40		469	460	
						15.10	16.27	21.13%	469	413	-2.49%
						15.10	19.20		469	499	
	Y-390 B1	24.3469	24.5099	0.669%	N/C	18.24	19.99		473	637	
						18.24	19.82	8.41%	473	551	24.67%
						18.24	19.51		473	581	
	ER-610 C1	22.8476	22.8700	0.098%	N/C	14.53	13.86		494	289	
						14.53	12.90	0.83%	494	298	-40.89%
						14.53	17.19		494	289	
	Y-833 D1	22.2667	22.2721	0.024%	N/C	11.38	11.76		557	531	
						11.38	13.40	12.33%	557	574	-5.15%
						11.38	13.19		557	480	
	923 E1	24.3171	24.4802	0.671%	N/C	15.85	19.79		503	667	
						15.85	19.79	24.71%	503	584	20.87%
						15.85	19.72		503	573	
	ISO-800 F1	23.9367	24.0438	0.447%	N/C	14.75	17.69		632	552	
						14.75	19.85	29.88%	632	571	-11.50%
						14.75	19.93		632	555	
	HFC-134a/Dow P-425 @ 260°F plus 24 hours @ 302°F(150°C)										
	U-475 A2	21.6728	21.6896	0.078%	N/C	15.10	12.06		469	495	
						15.10	15.53	-6.67%	469	508	17.56%
						15.10	14.69		469	651	
	Y-390 B2	24.2008	24.2750	0.307%	N/C	18.24	11.74		473	632	
						18.24	17.45	0.82%	473	573	25.09%
						18.24	19.33		473	570	
	ER-610 C2	23.7799	23.7757	-0.018%	N/C	14.53	13.34		494	369	
						14.53	16.25	1.12%	494	365	-21.46%
						14.53	14.49		494	430	
	Y-833 D2	22.5385	22.5093	-0.129%	N/C	11.38	12.20		557	489	
						11.38	12.09	4.63%	557	573	-9.99%
						11.38	11.43		557	442	
	923 E2	24.3908	24.4695	0.323%	N/C	15.85	16.57		503	636	
						15.85	17.13	6.31%	503	476	13.52%
						15.85	cracked		503	601	
	ISO-800 F2	23.8740	23.8861	0.051%	N/C	14.75	13.00		632	580	
						14.75	13.54	-7.95%	632	580	-8.70%
						14.75	14.19		632	571	

HELICAL COILS/WIRE A---HFC-134a/Dow P-425 @260°F(127°C)

500 HRS in HFC-134a/P-425 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER	U-475 A1	40.6214	40.8400	0.538%	N/C	73.73	53.57	-35.41%
						73.73	42.35	
						73.73	46.95	
	Y-390 B1	39.5701	39.8134	0.615%	N/C	43.78	50.70	14.41%
						43.78	52.75	
						43.78	46.82	
	ER-610 C1	37.8822	38.0086	0.334%	N/C	51.81	60.97	11.38%
						51.81	58.20	
						51.81	53.95	
POLYAMIDE	Y-833 D1	40.5884	40.5790	-0.023%	N/C	9.85	38.22	316.55%
						9.85	42.47	
						9.85	42.40	
	923 E1	39.1250	39.2760	0.386%	N/C	41.28	27.10	-29.97%
						41.28	36.52	
						41.28	23.10	
	ISO-800 F1	37.9819	38.2106	0.602%	N/C	45.01	30.67	-22.94%
						45.01	38.70	
						45.01	38.47	
500 HRS in HFC-134a/Dow P-425 @ 260 F -> 24 HRS 302°F								
IMIDE	U-475 A2	40.2297	40.3043	0.185%	N/C	73.73	1.20	-62.87%
						73.73	1.00	
						73.73	53.75	
	Y-390 B2	41.6526	41.7990	0.351%	N/C	43.78	19.52	-24.55%
						43.78	20.27	
						43.78	59.30	
	ER-610 C2	38.9143	38.9520	0.097%	N/C	51.81	67.77	23.14%
						51.81	59.77	
						51.81	63.85	
	Y-833 D2	40.9302	40.9148	-0.038%	N/C	9.85	26.82	204.70%
						9.85	35.30	
						9.85	27.92	
	923 E2	39.1009	39.1500	0.126%	N/C	41.28	38.70	-26.32%
						41.28	20.67	
						41.28	31.87	
	ISO-800 F2	39.2333	39.3320	0.252%	N/C	45.01	30.77	-18.89%
						45.01	38.85	
						45.01	39.90	

HELICAL COILS/WIRE B-HFC-134a/Dow P-425 Oil @ 260°F(127°C)

500 HRS in HFC-134a/Dow P-425 @ 260 F								
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE
POLYESTER	U-475 A1	37.6690	37.9310	0.696%	N/C	40.14	38.77	2.57%
						40.14	37.32	
						40.14	47.42	
POLYESTER	Y-390 B1	37.7918	38.1623	0.980%	N/C	36.12	44.50	20.99%
						36.12	42.40	
						36.12	44.20	
POLYAMIDE	ER-610 C1	37.3934	37.5840	0.510%	N/C	35.96	34.20	8.01%
						35.96	43.27	
						35.96	39.05	
POLYAMIDE	Y-833 D1	36.4965	36.5016	0.014%	N/C	33.14	44.22	10.32%
						33.14	28.90	
						33.14	broken	
POLYAMIDE	923 E1	37.5471	37.8420	0.785%	N/C	40.52	41.45	0.07%
						40.52	42.52	
						40.52	37.67	
POLYAMIDE	ISO-800 F1	35.8573	36.1177	0.726%	N/C	20.20	24.25	16.34%
						20.20	22.75	
						20.20	broken	
500 HRS in HFC-134a/Dow P425 @ 260 F -> 24 HRS 302°F								
EPM	U-475 A2	36.3789	36.4665	0.241%	N/C	40.14	30.05	-12.25%
						40.14	30.95	
						40.14	44.67	
EPM	Y-390 B2	38.0889	38.2627	0.456%	N/C	36.12	24.37	-52.85%
						36.12	16.32	
						36.12	10.40	
EPM	ER-610 C2	38.0776	38.1229	0.119%	N/C	35.96	29.65	-15.28%
						35.96	30.30	
						35.96	31.45	
OXLEY	Y-833 D2	37.8869	37.7935	-0.247%	N/C	33.14	14.30	-56.30%
						33.14	27.85	
						33.14	1.30	
GLASS	923 E2	37.5820	37.6544	0.193%	N/C	40.52	34.45	-11.18%
						40.52	37.87	
						40.52	35.65	
GLASS	ISO-800 F2	36.9766	37.0328	0.152%	N/C	20.20	21.22	0.02%
						20.20	18.92	
						20.20	20.47	

HELICAL COILS/WIRE C-HFC-134a/Dow P-425@ 260°F(127°C)

500 HRS in HFC-134a/Dow P-425 @ 260 F									
	VARN	COIL WT	EXP COIL WT	WT % CHANGE	EXP VIS	BASE BND STR (AVE)	EXP BND STR	BND STR % CHANGE	
POLYESTERIMIDE	U-475 A1	38.3776	38.5133	0.354%	N/C	51.21	25.52	-18.08%	
						51.21	72.37		
						51.21	27.97		
	Y-390 B1	39.6972	39.8576	0.404%	N/C	50.72	35.05	-33.51%	
						50.72	34.42		
						50.72	31.70		
	ER-610 C1	37.1782	37.2988	0.324%	N/C	58.33	31.55	-26.45%	
						58.33	54.65		
						58.33	42.50		
	Y-833 D1	38.4694	38.3049	-0.428%	N/C	5.84	6.50	89.50%	
						5.84	9.40		
						5.84	17.30		
	923 E1	39.1741	39.3288	0.395%	N/C	49.26	30.90	-40.68%	
						49.26	26.55		
						49.26	30.22		
	ISO-800 F1	37.8174	37.9913	0.460%	N/C	36.08	27.42	-52.75%	
						36.08	16.22		
						36.08	7.50		
	500 HRS in HFC-134a/Dow P-425 @ 260 F-> 24 HRS 302°F								
	POLYAMIDEIMIDE	U-475 A2	37.8220	37.8751	0.140%	N/C	51.21	14.97	2.38%
							51.21	68.67	
							51.21	73.65	
		Y-390 B2	39.3793	39.4589	0.202%	N/C	50.72	40.85	-22.69%
							50.72	35.87	
						50.72	40.92		
ER-610 C2		36.9959	37.0140	0.049%	N/C	58.33	55.37	-21.60%	
						58.33	50.62		
						58.33	31.20		
Y-833 D2		37.9455	37.7026	-0.640%	N/C	5.84	1.50	-84.02%	
						5.84	0.50		
						5.84	0.80		
923 E2		39.4991	39.5628	0.161%	N/C	49.26	37.45	-53.44%	
						49.26	2.50		
						49.26	28.85		
ISO-800 F2		39.0148	39.0820	0.172%	N/C	36.08	18.22	-34.02%	
						36.08	24.10		
						36.08	29.10		

SINGLE MAG WIRE WITHOUT VARNISH-HFC-134a/Dow P-425 @ 260°F(127°C))

500 HRS in HFC-134a/Dow P425 oil @ 260°F(127°C)					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
A1	3.3507	3.3542	0.104%	N/C	
					YES
B1	4.1783	4.1896	0.270%	N/C	
					YES
C1	3.6186	3.6209	0.064%	N/C	
					YES
500 HRS in HFC-134a/P-425 oil-> 302°F for 24 HRS					
A2	3.3379	3.338	0.003%	N/C	
					YES
B2	3.6683	3.6662	-0.057%	N/C	
					YES
C2	3.6322	3.6328	0.017%	N/C	
					YES

SINGLE/WIRE A/WITH VARNISH--HFC-134a/Dow P-425 @ 260°F(127°C)

500 HRS in HFC-134a/P-425 oil @ 260°F(127°C)						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER IMIDE POLYAMIDE	U-475 A1	4.1503	4.1547	0.106%	N/C	
						YES
	Y-390 B1	3.8787	3.8847	0.155%	N/C	
						NO
	ER-610 C1	3.9041	3.9102	0.156%	N/C	
						YES
	Y-833 D1	3.8760	3.8872	0.289%	N/C	
						YES
	923 E1	4.5965	4.5999	0.074%	N/C	
						NO
	ISO-800 F1	4.0680	4.0714	0.084%	N/C	
						YES
HFC-134a/P-425 oil @ 260°F -> 24 HRS @ 302F						
U-475 A2	4.1642	4.1594	-0.115%	N/C		
					YES	
Y-390 B2	3.7229	3.7284	0.148%	N/C		
					NO	
ER-610 C2	3.9741	3.9735	-0.015%	N/C		
					YES	
Y-833 D2	3.7825	3.7810	-0.040%	N/C		
					YES	
923 E2	4.7126	4.7311	0.393%	N/C		
					NO	
ISO-800 F2	4.0493	4.0510	0.042%	N/C		
					NO	

SINGLE/WIRE B/WITH VARNISH--HFC-134A/DOW P-425 oil @ 260°F(127°C)

500 HRS in HFC-134a/Dow P425 Oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE EPOXY GLASS	U-475 A1	4.3467	4.3512	0.104%	N/C	NO
	Y-390 B1	4.4710	4.4786	0.170%	N/C	NO
	ER-610 C1	4.2855	4.2917	0.145%	N/C	YES
	Y-833 D1	4.2268	4.2179	-0.211%	N/C	YES
	923 E1	4.2965	4.2999	0.079%	N/C	NO
	ISO-800 F1	3.5301	3.5412	0.314%	N/C	NO
	HFC-134a/Dow P-425 500 hr exp. plus 24 hrs.@302°F					
	U-475 A2	4.3495	4.3427	-0.156%	N/C	NO
	Y-390 B2	3.8533	3.8625	0.239%	N/C	NO
	ER-610 C2	4.2532	4.2524	-0.019%	N/C	YES
	Y-833 D2	4.3078	4.3055	-0.053%	N/C	YES
	923 E2	4.0704	4.0791	0.214%	N/C	NO
	ISO-800 F2	4.2458	4.2481	0.054%	N/C	NO

SINGLE/WIRE C/WITH VARNISH--HFC-134A/DOW P-425 oil 260°F(127°C)

500 HRS in HFC-134a/Dow P-425 oil @ 260°F						
	VARN	WIRE WT	EXP WIRE WT	WT % CHANGE	EXP VIS	EXP FLEX
POLYESTER POLYAMIDE MIDE	U-475 A1	4.3214	4.3301	0.201%	N/C	
						YES
	Y-390 B1	3.8211	3.8276	0.170%	N/C	
						NO
	ER-610 C1	3.5665	3.5720	0.154%	N/C	
						YES
	Y-833 D1	4.0962	4.1008	0.112%	N/C	
						YES
	923 E1	4.3753	4.3811	0.133%	N/C	
						NO
	ISO-800 F1	4.2121	4.2218	0.230%	N/C	
						YES
HFC-134a/Dow P425 oil -> 24 HRS @ 302°F						
U-475 A2	4.2233	4.2213	-0.047%	N/C		
					YES	
Y-390 B2	3.8208	3.8360	0.398%	N/C		
					NO	
ER-610 C2	4.0088	4.0093	0.012%	N/C		
					YES	
Y-833 D2	4.1379	4.1367	-0.029%	N/C		
					YES	
923 E2	4.3357	4.3456	0.228%	N/C		
					NO	
ISO-800 F2	4.1735	4.1748	0.031%	N/C		
					YES	

500 HRS IN R-134a/Dow P-425 @ 260°F					
ID	WT	EXP WT	WT % CHANGE	EXP VIS	EXP FLEX
U-475 A1	2.3489	2.6007	10.72%	Surface Cloudy S. Warped	N/C
Y-390 B1	1.4581	1.7230	18.17%	N/C	N/C
ER-610 C1	2.3853	2.5741	7.92%	N/C	N/C
Y-833 D1	3.0528	3.3104	8.44%	Slightly warped light green	N/C
923 E1	2.2642	2.5669	13.37%	Warped	N/C
ISO-800 F1	2.7004	3.3993	25.88%	N/C	N/C
R-134a/Dow P-425 at --->24 hour at 302°F.					
U-475 A2	2.4376	2.5508	4.64%	Darkened	N/C
Y-390 B2	1.4398	1.6963	17.81%	N/C	N/C
ER-610 C2	2.6061	2.6952	3.42%	Darkened	N/C
Y-833 D2	3.7518	3.9145	4.34%	Darkened	N/C
923 E2	2.0059	2.1592	7.64%	Warped Darkened	N/C
ISO-800 F2	1.7138	1.9353	12.92%	darkened	N/C

SHEET INSULATION-HFC-134a/Dow P-425 oil @ 260°F(127°C)

500 HRS in HFC-134a/Dow P-425 Oil @ 260 F									
ID	WT	EXP WT	WT % CHANGE	SAMPLE WIDTH	BREAK LOAD	SAMPLE THICKNESS Mils	TENSILE STR BASE	TENSILE STR EXP	%CHANGE TENSILE
NO/MY/NO A1	4.5920	4.9779	8.40%	0.401	124.70	21	17.4	14.81	
				0.453	145.20	21	17.4	15.26	-13.15%
				0.437	140.10	21	17.4	15.27	
DA/MY/DA B1	4.5551	4.4015	-3.37%	0.425	102.30	21	13.7	11.46	
				0.450	106.80	21	13.7	11.30	-16.91%
				0.378	90.40	21	13.7	11.39	
MYLAR MO C1	2.1785	2.2287	2.30%	0.424	72.70	10	21.7	17.15	
				0.373	61.10	10	21.7	16.38	-23.23%
				0.462	76.00	10	21.7	16.45	
NO 410 D1	2.1551	2.4530	13.82%	0.503	93.80	10	18.7	18.65	
				0.486	88.24	10	18.7	18.16	-2.50%
				0.517	92.50	10	18.7	17.89	
NO MI 418 E1	2.0663	2.5399	22.92%	0.501	30.75	10	7.5	6.14	
				0.506	31.00	10	7.5	6.13	-17.87%
				0.494	30.70	10	7.5	6.21	
MEL 228 F1	2.3513	2.4106	2.52%	0.444	68.50	10	21.7	15.43	
				0.364	56.70	10	21.7	15.58	-28.67%
				0.420	64.80	10	21.7	15.43	
500 HRS in HFC-134a/Dow P-425 Oil @ 260 F ->24 HRS @ 302°F									
NO/MY/NO A2	4.4997	4.5757	1.69%	0.418	137.20	21	17.4	15.63	
				0.368	118.90	21	17.4	15.39	-12.39%
				0.419	129.50	21	17.4	14.72	
DA/MY/DA B2	4.5247	4.5247	0.00%	0.405	98.20	21	13.7	11.55	
				0.405	96.75	21	13.7	11.38	-16.54%
				0.495	118.30	21	13.7	11.38	
MYLAR MO C2	2.3218	2.3255	0.16%	0.401	30.30	10	21.7	7.56	
				0.390	39.30	10	21.7	10.08	-48.61%
				0.482	76.25	10	21.7	15.82	
NOMEX 410 D2	2.3539	2.4169	2.68%	0.455	87.90	10	18.7	19.32	
				0.528	101.60	10	18.7	19.24	3.20%
				0.495	95.70	10	18.7	19.33	
NO/MI 418 E2	2.1829	2.2012	0.84%	0.486	23.20	10	7.5	4.77	
				0.479	27.05	10	7.5	5.65	-29.07%
				0.492	27.25	10	7.5	5.54	
MEL 228 F2	2.2705	2.4207	6.62%	0.415	59.05	10	21.7	14.23	
				0.455	76.55	10	21.7	16.82	-27.00%
				0.402	66.20	10	21.7	16.47	

SHEET INSULATION-HFC-134a/Dow P-425 oil @ 260°F(127°C)

500 HRS in HFC-134a/Dow P-425 Oil @ 260 F								
ID	STRETCH (inch)	% ELONG	BASE ELONG (AVE)	ELONG % CHANGE	BASE DIE (AVE)	EXP DIE	DIE % CHANGE	VISUAL EXP
NO/MY/NO A1	0.38	9.5%	20.0%		>18.97	flash		Nomex totally delaminated from the mylar, glue still t
	0.41	10.3%	20.0%	-50.6%	>18.97	flash	flash	
	0.34	8.5%	20.0%		>18.97	flash		
DA/MY/DA B1	0.39	19.5%	46.0%		>15.27	flash		Dacron totally delaminated from the mylar, glue gone
	0.39	19.5%	46.0%	-57.6%	>15.27	flash	flash	
	0.39	19.5%	46.0%		>15.27	flash		
MYLAR MO C1	2.27	113.5%	131.0%		>14.91	flash		N/C
	2.24	112.0%	131.0%	-16.3%	>14.91	flash	flash	
	2.07	103.5%	131.0%		>14.91	flash		
NO 410 D1	0.36	18.0%	17.0%		10.67	12.41		N/C
	0.34	8.5%	17.0%	-33.3%	10.67	13.12	16.8%	
	0.30	7.5%	17.0%		10.67	11.86		
NO MI 418 E1	0.05	1.3%	4.0%		10.23	10.69		N/C
	0.05	1.3%	4.0%	-68.8%	10.23	11.33	9.0%	
	0.05	1.3%	4.0%		10.23	11.42		
MEL 228 F1	2.69	134.5%	160.0%		>14.22	flash		slightly yellowed
	2.70	135.0%	160.0%	-32.2%	>14.22	flash	flash	
	1.12	56.0%	160.0%		>14.22	flash		
500 HRS in HFC-134a/Dow P-425 Oil @ 260 F ->24 HRS @ 302°F								
NO/MY/NO A2	0.36	9.0%	20.0%		>18.97	flash		Delamination as above also darkened
	0.33	8.3%	20.0%	-61.3%	>18.97	flash	flash	
	0.24	6.0%	20.0%		>18.97	flash		
DA/MY/DA B2	0.34	17.0%	46.0%		>15.27	flash		Delamination as above darkened
	0.34	17.0%	46.0%	-67.4%	>15.27	flash	flash	
	0.22	11.0%	46.0%		>15.27	flash		
MYLAR MO C2	0.03	1.5%	131.0%		>14.91	flash		slightly more yellowed
	0.04	2.0%	131.0%	-72.3%	>14.91	flash	flash	
	2.11	105.5%	131.0%		>14.91	flash		
NOMEX 410 D2	0.39	9.8%	17.0%		10.67	8.70		slightly Darkened few pockets
	0.39	9.8%	17.0%	-44.6%	10.67	10.54	-21.7%	
	0.35	8.8%	17.0%		10.67	5.82		
NO/MI 418 E2	0.03	0.8%	4.0%		10.23	10.14		N/C
	0.04	1.0%	4.0%	-79.2%	10.23	8.54	-6.5%	
	0.03	0.8%	4.0%		10.23	10.00		
MEL 228 F2	0.07	3.5%	160.0%		>14.22	flash		yellowed
	0.13	6.5%	160.0%	-96.5%	>14.22	flash	flash	
	0.14	7.0%	160.0%		>14.22	flash		

SLEEVING--HFC-134a/Dow P-425 Oil @ 260°F(127°C)

500 HRS in HFC-134a/Dow P-425 @ 260°F				
	WT	EXP WT	% CHANGE	EXP VIS
A1 NOMEX	0.5645	0.6522	15.54%	N/C
B1 MYLAR	0.4999	0.5149	3.00%	small Pockets when rubbed between fingers tube bacame cloudy in appearance
C1 NO/MY	0.3863	0.4063	5.18%	some small pockets
HFC-134a/Dow P-425 oil @ 260°F plus 24 hrs @ 302°F				
A2 NOMEX	0.5351	0.5499	2.77%	Slightly Darkened
B2 MYLAR	0.4911	0.4867	-0.90%	no pockets warped Darkened
C2 NO/MY	0.3912	0.3816	-2.45%	slightly darkened some pockets where mylar pulled away.

500 HRS in HFC-134a/Dow P-425 @ 260 F									
ID	WT	EXP WT	WT % CHANGE	BREAK LOAD (AVE)	BREAK LOAD EXP	% CHANGE BRK LOAD	STRETCH (INCH)	%ELONG	EXP VIS
A1 Glass	1.7011	1.7082	0.42%	39.02	67.37		0.07	3.50%	N/C
				39.02	57.20	52.20%	0.06	3.00%	
				39.02	53.60		0.07	3.50%	
B1 Polyester	0.7173	0.7295	1.70%	56.12	60.77		0.78	39.00%	N/C
				56.12	62.05	8.20%	0.79	39.50%	
				56.12	59.35		0.72	36.00%	
C1 Permacel	1.4783	1.9850	34.28%	88.50	44.20		0.15	7.50%	Slightly
				88.50	48.92	-47.05%	0.18	9.00%	darkened
				88.50	47.47		0.14	7.00%	Curled up
500 HRS in HFC-134a/Dow P-425 @ 260 F-> 302°F 24 HRS									
A2 Glass	1.4832	1.4863	0.21%	39.02	58.40		0.06	3.00%	N/C
				39.02	45.95	42.11%	0.05	2.50%	
				39.02	62.00		0.07	3.50%	
B2 Polyester	0.6729	0.6651	-1.16%	56.12	48.60		0.42	21.00%	N/C
				56.12	49.45	-12.54%	0.47	23.50%	
				56.12	49.20		0.44	22.00%	
C2 Permacel	1.2966	1.1624	-10.35%	88.50	76.85		0.10	5.00%	Slightly
				88.50	79.45	-0.90%	0.08	4.00%	Darkened
				88.50	106.80		0.11	5.50%	

TIE CORD--HFC-134a/Dow P-425 oil @ 260°F(127°C)

500 HRS IN R-134a/Dow P-425 @ 260° F									
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BREAK LOAD (AVE)	BREAK LOAD EXP (ave)	% CHANGE BRK LOAD	STRETCH (Inch)	% ELONG
A1	0.3325	0.3385	1.80%	N/C	28.36	32.10		0.36	18.0%
					28.36	34.32	16.17%	0.42	21.0%
					28.36	32.42		0.40	20.0%
500 HRS IN R-134a/Dow P-425 -> 24 HRS @ 302°F									
A2	0.3176	0.3156	-0.630%	N/C	28.36	35.30		0.45	22.5%
					28.36	36.45	23.53%	0.53	26.5%
					28.36	33.35		0.47	23.5%

LEAD WIRE INSULATION-HFC-134a/Dow P-425 @ 260°F(127°C)

500 HRS IN HFC-134a/Dow P-425 @ 260°F							
ID	WT	EXP WT	WT % CHANGE	EXP VIS	BASE DIE (AVE)	EXP DIE	DIE% CHANGE
DMD	4.0906	4.2629	4.21%	N/C	9.61	9.68	
A1					9.61	9.10	-4.34%
					9.61	8.80	
DTMD	4.2861	4.4238	3.21%	N/C	9.95	12.13	
B1					9.95	11.93	17.96%
					9.95	11.15	
HFC-134a/Dow P-425 @ 260°F -> 24 HRS @ 302°F							
DMD	4.1027	4.1824	1.94%	N/C	9.61	9.41	
A2					9.61	9.00	-5.72%
					9.61	8.77	
DTMD	4.3339	4.3812	1.09%	N/C	9.95	11.17	
B2					9.95	10.47	2.31%
					9.95	8.90	

END

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