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Index to the LLNL Evaluated Charged-Particle Library (EPCL)

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Foreword

The UCRL-90400 series, *An Integrated System for Production of Neutronics and Photonics Calculational Constants*, describes an integrated, computer-oriented system for the production and application of neutronics and photonics calculational constants.

The system supplies reliable, up-to-date data, selects specific types of data on request, provides output in a variety of forms (ultimately in the form of input to other computer codes), and functions rapidly and efficiently.

The UCRL-90400 series comprises the following volumes:

- Vol. 1, Part A, Rev. 3, *ECSIL: A System for Storage, Retrieval, and Display of Experimental Neutron Data*, September 1976.
- Vol. 1, Part B, *Program ECSX4 (Version 78-1): Conversion of Experimentally Measured Cross-Section Data from the Four-Center-Exchange (K-4) Format to the Livermore ECSIL Format*, December 1978.
- Vol. 2, Rev. 2, *A Bibliography of the Experimental Data of Neutron-Induced Interactions*, July 1976.
- Vol. 3, Rev. 2, *An Index of the Experimental Data of Neutron-Induced Interactions*, July 1976.
- Vol. 4, Rev. 1, *Evaluated Nuclear Data Library*, September 1981.
- Vol. 4, Rev. 1, Appendix C, *The Neutron Library (ENDL82) in the Transmittal Format*, June 1982.
- Vol. 5, Part A, Rev. 1, *CLYDE: A Code for the Production of Calculational Constants from Nuclear Data*, September 1975.
- Vol. 5, Part B, Rev. 1, *Relativistic Transformations between Center-of-Mass and Laboratory Systems for Two-Body Nuclear Reactions*, April 1978.
- Vol. 6, Rev. 2, *Tables and Graphs of Photon-Interaction Cross Sections from 1 keV to 100 MeV*, December 1978.
- Vol. 7, Part A, Rev. 1, *Major Neutron-Induced Interactions ($Z \leq 55$): Graphical, Experimental Data*, July 1976.
- Vol. 7, Part B, Rev. 1, *Major Neutron-Induced Interactions ($Z > 55$): Graphical, Experimental Data*, July 1976.
- Vol. 8, Part A, Rev. 1, *Supplemental Neutron-Induced Interactions ($Z \leq 35$): Graphical, Experimental Data*, July 1976.
- Vol. 8, Part B, Rev. 1, *Supplemental Neutron-Induced Interactions ($Z > 35$): Graphical, Experimental Data*, July 1976.
- Vol. 9, *Thresholds of Nuclear Reactions Induced by Neutrons, Photons, Deuterons, Tritons, and Alpha Particles*, September 1970.
- Vol. 10, Rev. 1, *Tabulated Experimental Data for Neutron-Induced Interactions*, July 1976.
- Vol. 11, *Experimental Data, Indexes, and Techniques of Obtaining a Selected Set of Neutron Resonance Parameters*, May 1972.
- Vol. 12, *An Atlas of Resolved Neutron Resonance Parameters*, July 1972.
- Vol. 13, *An Atlas of Unresolved Neutron Resonance Parameters*, September 1972.
- Vol. 14, *TARTNP: A Coupled Neutron-Photon Monte Carlo Transport Code*, February 1976.
- Vol. 15, Part A, *The LLL Evaluated-Nuclear-Data Library (ENDL): Evaluation Techniques, Reaction Index, and Descriptions of Individual Evaluations*, September 1975.
- Vol. 15, Part B, Rev. 1, *The LLL Evaluated-Nuclear-Data Library (ENDL): Graphs of Cross Sections from the Library*, October 1978.
- Vol. 15, Part C, *The LLL Evaluated-Nuclear-Data Library (ENDL): Translation of ENDL Neutron-Induced Interaction Data into the ENDF/B Format*, April 1976.
- Vol. 15, Part D, Rev. 1, *The LLL Evaluated-Nuclear-Data Library (ENDL): Descriptions of Individual Evaluations for $Z = 0-98$* , May 1978.
- Vol. 15, Part E, *Data Testing Results for the LLL Nuclear Data Library (ENDL-78)*, August 1979.
- Vol. 15, Part F, *Experimental and Evaluated Elastic Nuclear Plus Interference Cross Sections for Light Charged Particles*, July 1980.
- Vol. 16, Rev. 2, *Tabular and Graphical Presentation of 175 Neutron-Group Constants Derived from the LLL Evaluated-Nuclear-Data Library (ENDL)*, October 1978.
- Vol. 17, Part A, Rev. 2, *Program LINEAR (Version 79-1): Linearize Data in the Evaluated-Nuclear-Data File/Version B (ENDF/B) Format*, October 1979.

- Vol. 17, Part B, Rev. 2, Program SIGMAL (Version 79-1): Doppler Broadened Evaluated Cross Sections in the Evaluated-Nuclear-Data File/Version B (ENDF/B) Format, October 1979.
- Vol. 17, Part C, Program RECENT: Reconstruction of Energy-Dependent Cross Sections from Resonance Parameters in the ENDF/B Format, October 1979.
- Vol. 17, Part D, Program GROUPIE: Calculation of Self-Shielded Cross Sections and Multiband Parameters from Evaluated Data in the ENDF/B Format, 1980.
- Vol. 17, Part E, Program EWALPLOT: Plot Data in the Evaluated-Nuclear-Data File/Version B (ENDF/B) Format, February 1979.
- Vol. 17, Part E, DOWNER (Version 79-1): Group Collapse Cross Section and Transfer Matrices, January 1979.
- Vol. 18, ACTL: Evaluated Neutron Activation Cross-Section Library, October 1978.
- Vol. 19, Neutron-Induced Angular and Energy Distributions: Graphical Experimental Data, April 1977.
- Vol. 20, Bondarenko Self-Shielded Cross Sections and Multiband Parameters Derived from the LLL Evaluated-Nuclear-Data Library (ENDL), July 1978.
- Vol. 21, Part A, Maxwell-Averaged Reactions Rates (σ) for Selected Reactions between Ions with Atomic Mass ≤ 11 , February 1979.
- Vol. 21, Part C, Program SIGMAL (Version 79-1): Doppler-Broadened Evaluated Cross Sections in the Livermore-Evaluated Nuclear Data Library (ENDL) Format, March 1979.
- Vol. 22, Rev. 1, GAMIDEN: A Program to Aid in the Identification of Unknown Materials by Gamma-Ray Spectroscopy, June 1982.
- Vol. 23, ENSL and CDRL: Evaluated Nuclear Structure Libraries, February 1981.
- Vol. 23, Addendum, ENSL82 and CDRL82: The 1982 Version of Evaluated Nuclear Structure Libraries, January 1983.
- Vol. 24, Thresholds and Q Values of Nuclear Reactions Induced by Neutrons, Protons, Deuterons, Tritons, ^3He Ions, Alpha Particles, and Photons, March 1981.
- Vol. 25, OMEGA: A CRAY 1 Executive Code for LLNL Nuclear Data Libraries, August 1983.
- Vol. 26, A Bibliography and Index for Nuclear Reactions Among Light Charged Particles, September 1984.
- Vol. 27, Calculated Neutron KERMA Factors Based on the LLNL ENDL Data File, January 1986.
- Vol. 28, Index to the LLNL Evaluated Charged-Particle Library (EPCL), March 1986.

02/10/86

 1-N -1
 ATOMIC MASS = 1.00782500
 GROUND STATE
 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER	
P.COUL.SC		CROSS-SECTION	111	81/02/27	0.	1.0000E-04	2.0000E+01		
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01		
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01		
	P		ANGULAR DIST.	12	81/02/27	0.	1.0000E-04	2.0000E+01	
	P(R)		ENERGY DEP. TO Y0	14	83/04/05	0.	1.0000E-04	2.0000E+01	
D.COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01		
	D		ANGULAR DIST.	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01		
	P(R)		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	P(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
T.COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01		
	T		ANGULAR DIST.	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01		
	P(R)		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	P(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
HE3.COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01		
	HE3		ANGULAR DIST.	20	81/02/27	0.	1.0000E-04	2.0000E+01	
	HE3		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
	P(R)		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	P(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
A.COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01		
	A		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	A		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
	P(R)		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	P(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
P.NUC+INT		CROSS-SECTION	28	79/08/20	0.	6.0000E-01	2.0000E+01		
		MAXM. AV. REACT. RATES	126	80/02/23	0.	3.0200E-03	1.0000E+00		
		IN-FLT REACT. X-SECS	20	79/08/20	0.	1.0000E-01	1.0000E+00		
		MAXM. AV. TOT. AV. ENERGY	6	82/05/15	0.	6.0000E-03	1.0000E+00		
	P		ANGULAR DIST.	7	80/06/18	0.	6.0000E-01	1.0000E+00	
	P(R)		ENERGY DEP. TO Y0	7	83/04/05	0.	6.0000E-01	1.0000E+00	
D.NUC+INT		CROSS-SECTION	22	79/08/20	0.	1.5588E-01	2.0000E+01		
		IN-FLT REACT. X-SECS	20	79/08/20	0.	1.0000E-01	1.0000E+00		
	D		ANGULAR DIST.	7	80/06/18	0.	1.5588E-01	1.0000E+00	
	D		ENERGY DEP. TO Y0	17	83/04/05	0.	1.5588E-01	1.0000E+00	

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ATOMIC MASS = 1.007825+00
 CROSS SECTION STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
D,NUC+INT	P(R)	ANGULAR DIST.	7	80/06/18	0.	1.5588E-01	2.0000E+01	
	P(R)	ENERGY DEP. TO Y0	16	83/04/05	0.	1.5588E-01	2.0000E+01	
T,NUC+INT		CROSS-SECTION	20	79/08/20	0.	1.9153E-01	2.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	0.	2.0000E+01	
	T	ANGULAR DIST.	5	80/06/18	0.	0.9153E-01	2.0000E+01	
	T	ENERGY DEP. TO Y0	9	83/04/05	0.	0.9153E-01	2.0000E+01	
	P(R)	ANGULAR DIST.	5	80/06/18	0.	1.9153E-01	2.0000E+01	
	P(R)	ENERGY DEP. TO Y0	11	83/04/05	0.	1.9153E-01	2.0000E+01	
HE3,NUC+INT		CROSS-SECTION	19	79/08/20	0.	5.8305E-01	2.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	0.	2.0000E+01	
	HE3	ANGULAR DIST.	5	80/06/18	0.	0.8305E-01	2.0000E+01	
	HE3	ENERGY DEP. TO Y0	11	83/04/05	0.	0.8305E-01	2.0000E+01	
	P(R)	ANGULAR DIST.	5	80/06/18	0.	5.8305E-01	2.0000E+01	
	P(R)	ENERGY DEP. TO Y0	11	83/04/05	0.	5.8305E-01	2.0000E+01	
A,NUC+INT		CROSS-SECTION	27	79/08/20	0.	4.4878E-01	2.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	0.	2.0000E+01	
	A	ANGULAR DIST.	6	80/06/18	0.	4.4878E-01	2.0000E+01	
	A	ENERGY DEP. TO Y0	15	83/04/05	0.	4.4878E-01	2.0000E+01	
	P(R)	ANGULAR DIST.	6	80/06/18	0.	4.4878E-01	2.0000E+01	
	P(R)	ENERGY DEP. TO Y0	18	83/04/05	0.	4.4878E-01	2.0000E+01	
T,N'		CROSS-SECTION	11	85/04/10	-7.6400E-01	3.0500E+00	2.0000E+01	
		MAXM. AV. REACT. RATES	97	80/02/23	-7.6400E-01	8.200E-03	2.0000E+01	
		IN-FLT REACT. X-SECS	20	85/02/21	-7.6400E-01	0.	2.0000E+01	
	N	ANGULAR DIST.	5	85/04/10	-7.6400E-01	0.0500E+00	2.0000E+01	
	N	ENERGY DEP. TO Y0	12	85/04/16	-7.6400E-01	0.0500E+00	2.0000E+01	
	H(R)	ANGULAR DIST.	5	85/04/10	-7.6400E-01	0.0500E+00	2.0000E+01	
	H(R)	ENERGY DEP. TO Y0	11	85/04/16	-7.6400E-01	0.0500E+00	2.0000E+01	

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 1-N -2
 ATOMIC MASS 2.014102
 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER	
P,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01		
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	1.0000E+00		
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01		
	P		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	D(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
D(R)		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01		
D(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01		
D,COUL.SC		CROSS-SECTION	108	81/02/27	0.	1.0000E-04	2.0000E+01		
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	1.0000E+00		
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01		
	D		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	D(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
D(R)		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01		
D(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01		
T,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	1.0000E+00		
		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01		
	T		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
	D(R)		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	D(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
HE3,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	1.0000E+00		
	HE3		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	HE3		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
	D(R)		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	D(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
A,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	1.0000E+00		
	A		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	A		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
	D(R)		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	D(R)		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
P,NUC+INT		CROSS-SECTION	28	79/08/20	0.	7.8000E-02	2.0000E+01		
		MAXH. AV. REACT. RATES	161	80/02/23	0.	1.2000E-04	2.0000E+01		
		IN-FLT REACT. X-SECS	20	79/08/20	0.	0.	1.0000E+00		
		MAXH. AV. TOT. AV. ENERGY	6	82/05/15	0.	1.0000E-04	2.0000E+01		
	P		ANGULAR DIST.	7	80/06/15	0.	7.8000E-02	2.0000E+01	
	D(R)		ENERGY DEP. TO Y0	20	83/04/05	0.	7.8000E-02	2.0000E+01	
D(R)		ANGULAR DIST.	7	80/06/15	0.	7.8000E-02	2.0000E+01		
D(R)		ENERGY DEP. TO Y0	20	83/04/05	0.	7.8000E-02	2.0000E+01		
D,NUC+INT		CROSS-SECTION	22	79/08/20	0.	9.3000E-02	2.0000E+01		
		MAXH. AV. REACT. RATES	164	80/02/23	0.	4.6000E-04	1.0000E+00		

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ATOMIC MASS 1-N = 2
 2.01410200
 ORGANS STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
D, NUC+INT		IN-FLT REACT. X-SECS	20	79/08/20	0.	0.	1.00000E+00	
		MAXW. AV. TOT. AV. ENERGY	5	82/05/15	0.	4.00000E+00	1.00000E+00	
D		ANGULAR DIST.	8	80/06/18	0.	3.00000E+00	1.00000E+00	
D		ENERGY DEP. TO Y0	8	83/04/05	0.	3.00000E+00	1.00000E+00	
D(R)		ANGULAR DIST.	8	80/06/18	0.	3.00000E+00	1.00000E+00	
D(R)		ENERGY DEP. TO Y0	8	83/04/05	0.	3.00000E+00	1.00000E+00	
T, NUC+INT		CROSS-SECTION	19	79/08/20	0.	1.0782E-01	2.00000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	0.0782E-01	2.00000E+01	
T		ANGULAR DIST.	7	80/06/18	0.	0.0782E-01	2.00000E+01	
T		ENERGY DEP. TO Y0	21	83/04/05	0.	0.0782E-01	2.00000E+01	
D(R)		ANGULAR DIST.	7	80/06/18	0.	0.0782E-01	2.00000E+01	
D(R)		ENERGY DEP. TO Y0	18	83/04/05	0.	0.0782E-01	2.00000E+01	
HE3, NUC+INT		CROSS-SECTION	19	79/08/20	0.	1.1563E-01	2.00000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	1.1563E-01	2.00000E+01	
HE3		ANGULAR DIST.	6	80/06/18	0.	1.1563E-01	2.00000E+01	
HE3		ENERGY DEP. TO Y0	20	83/04/05	0.	1.1563E-01	2.00000E+01	
D(R)		ANGULAR DIST.	6	80/06/18	0.	1.1563E-01	2.00000E+01	
D(R)		ENERGY DEP. TO Y0	16	83/04/05	0.	1.1563E-01	2.00000E+01	
A, NUC+INT		CROSS-SECTION	31	79/08/20	0.	2.4444E-01	2.00000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	2.4444E-01	2.00000E+01	
A		ANGULAR DIST.	17	80/06/18	0.	2.4444E-01	2.00000E+01	
A		ENERGY DEP. TO Y0	22	83/04/05	0.	2.4444E-01	2.00000E+01	
D(R)		ANGULAR DIST.	17	80/06/18	0.	2.4444E-01	2.00000E+01	
D(R)		ENERGY DEP. TO Y0	21	83/04/05	0.	2.4444E-01	2.00000E+01	
D, N'		CROSS-SECTION	77	74/09/10	3.2690E+00	1.0000E-03	2.00000E+01	
		MAXW. AV. REACT. RATES	182	78/03/02	3.2690E+00	1.0000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	74/09/10	3.2690E+00	1.0000E-04	2.00000E+01	
		MAXW. AV. TOT. AV. ENERGY	17	82/05/15	3.2690E+00	1.0000E-04	2.00000E+01	
N		ANGULAR DIST.	63	77/10/28	3.2690E+00	1.0000E-04	2.00000E+01	
N		ENERGY DEP. TO Y0	2	83/04/05	3.2690E+00	1.0000E-04	2.00000E+01	
N		ENERGY FROM THER. REACT.	11	81/09/06	3.2690E+00	1.0000E-04	2.00000E+01	
N		MAXW. AV. TOT. AV. E OF PART	11	81/09/06	3.2690E+00	1.0000E-04	2.00000E+01	
H(R)		ANGULAR DIST.	63	80/07/03	3.2690E+00	1.0000E-04	2.00000E+01	
H(R)		ENERGY DEP. TO Y0	2	83/04/05	3.2690E+00	1.0000E-04	2.00000E+01	
H(R)		ENERGY FROM THER. REACT.	11	81/09/06	3.2690E+00	1.0000E-04	2.00000E+01	
H(R)		MAXW. AV. TOT. AV. E OF PART	11	81/09/06	3.2690E+00	1.0000E-04	2.00000E+01	
T, N'		CROSS-SECTION	101	83/11/05	1.7590E+01	1.0000E-03	2.00000E+01	
		IN-FLT REACT. X-SECS	20	83/11/05	1.7590E+01	1.0000E-03	2.00000E+01	
N		ANGULAR DIST.	52	80/07/03	1.7590E+01	1.4973E-03	2.00000E+01	
N		ENERGY DEP. TO Y0	5	83/04/05	1.7590E+01	1.4973E-03	2.00000E+01	
A(R)		ANGULAR DIST.	52	80/07/03	1.7590E+01	1.4973E-03	2.00000E+01	
A(R)		ENERGY DEP. TO Y0	8	83/04/05	1.7590E+01	1.4973E-03	2.00000E+01	
A, N' P		CROSS-SECTION	5	85/06/03	-2.2240E+00	1.2520E+01	2.00000E+01	
		MAXW. AV. REACT. RATES	75	80/02/23	-2.2240E+00	1.2520E+01	2.00000E+01	
		IN-FLT REACT. X-SECS	19	85/06/03	-2.2240E+00	1.0000E+02	2.00000E+01	

LEVEL 0
 LEVEL 1
 LEVEL 2
 1-N 0
 1-N 2

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 1-N - 2
 ATOMIC MASS = 2.01410170
 STABLE

REACTION	YO	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
A,N'P	N	ANGULAR DIST.	2	85/06/03	-1.240E+00	1.111111E+01	1.111111E+01	.....
	N	ENERGY DEP. TO YO	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
	N	ENERGY-ANGLE DIST.	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
	P	ENERGY DEP. TO YO	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
	A(R)	ENERGY-ANGLE DIST.	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
A,PN'	A(R)	ENERGY DEP. TO YO	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
		CROSS-SECTION	8	85/07/01	-1.240E+00	6.4500E+00	1.111111E+01	.....
		MAXM. AV. REACT. RATES	8	80/02/23	-1.240E+00	4.020E-02	1.111111E+01	.....
		IN-FLT REACT. X-SECS	20	85/07/01	-1.240E+00	1.111111E+01	1.111111E+01	.....
	N	ENERGY-ANGLE DIST.	2	85/07/01	-1.240E+00	1.111111E+01	1.111111E+01	.....
A,PN'	N	ENERGY DEP. TO YO	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
	P	ENERGY-ANGLE DIST.	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
	P	ENERGY DEP. TO YO	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
	A(R)	ENERGY-ANGLE DIST.	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
	A(R)	ENERGY DEP. TO YO	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
T,ONA		CROSS-SECTION	5	85/06/03	-1.240E+00	9.2200E+00	1.111111E+01	.....
		MAXM. AV. REACT. RATES	8	80/02/23	-1.240E+00	4.020E-02	1.111111E+01	.....
		IN-FLT REACT. X-SECS	20	85/06/03	-1.240E+00	1.111111E+01	1.111111E+01	.....
	N	ENERGY-ANGLE DIST.	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
	N	ENERGY DEP. TO YO	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
D,P	P	ANGULAR DIST.	2	85/06/03	-1.240E+00	1.111111E+01	1.111111E+01	.....
	P	ENERGY DEP. TO YO	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
	A(R)	ENERGY-ANGLE DIST.	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
	A(R)	ENERGY DEP. TO YO	2	85/07/07	-1.240E+00	1.111111E+01	1.111111E+01	.....
		CROSS-SECTION	126	79/10/25	1.7590E+01	1.4980E-03	1.111111E+01	.....
D,P		IN-FLT REACT. X-SECS	20	79/10/25	1.7590E+01	1.111111E+01	1.111111E+01	.....
	N	ENERGY-ANGLE DIST.	16	82/11/15	1.7590E+01	1.111111E+01	1.111111E+01	.....
	N	ENERGY DEP. TO YO	4	83/04/05	1.7590E+01	1.111111E+01	1.111111E+01	.....
	G	ENERGY-ANGLE DIST.	80	80/07/05	1.7590E+01	1.111111E+01	1.111111E+01	.....
	G	MULTIPLICITY	80	80/07/05	1.7590E+01	1.111111E+01	1.111111E+01	.....
D,P	A(R)	ENERGY DEP. TO YO	1	83/04/05	1.7590E+01	1.111111E+01	1.111111E+01	.....
	A(R)	ENERGY-ANGLE DIST.	1	82/11/15	1.7590E+01	1.111111E+01	1.111111E+01	.....
	A(R)	ENERGY DEP. TO YO	9	83/04/05	1.7590E+01	1.111111E+01	1.111111E+01	.....
		CROSS-SECTION	69	74/09/10	4.0340E+00	1.0000E-03	1.111111E+01	.....
		MAXM. AV. REACT. RATES	182	75/03/02	4.0340E+00	1.0000E-04	1.111111E+01	.....
D,P		IN-FLT REACT. X-SECS	20	82/05/10	4.0340E+00	1.111111E+01	1.111111E+01	.....
		MAXM. AV. TOT. AV. ENERGY	6	80/07/05	4.0340E+00	1.111111E+01	1.111111E+01	.....
	P	ANGULAR DIST.	2	83/04/05	4.0340E+00	1.111111E+01	1.111111E+01	.....
	P	ENERGY DEP. TO YO	11	81/07/18	4.0340E+00	1.111111E+01	1.111111E+01	.....
	P	ENERGY FROM THER. REACT.	11	81/07/18	4.0340E+00	1.111111E+01	1.111111E+01	.....
NES,P		MAXM. AV. TOT. AV. E OF PART	11	81/07/18	4.0340E+00	1.111111E+01	1.111111E+01	.....
	T(R)	ANGULAR DIST.	63	80/07/05	4.0340E+00	1.111111E+01	1.111111E+01	.....
	T(R)	ENERGY DEP. TO YO	2	83/04/05	4.0340E+00	1.111111E+01	1.111111E+01	.....
	T(R)	ENERGY FROM THER. REACT.	11	81/07/18	4.0340E+00	1.111111E+01	1.111111E+01	.....
	T(R)	MAXM. AV. TOT. AV. E OF PART	11	81/07/18	4.0340E+00	1.111111E+01	1.111111E+01
	CROSS-SECTION	125	81/06/25	1.8354E+01	7.4900E-03	2.0000E+01	

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02/10/86

ATOMIC MASS = 2.014101778
 1-N-2
 GROUND STATE
 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
HE3,P								
		IN-FLT REACT. X-SECS	20	81/06/25	1.83354E+01	0.	1.00000E+00	
	P	ANGULAR DIST.	63	81/06/25	1.83354E+01	7.49000E-01	1.00000E+01	
	P	ENERGY DEP. TO Y0	5	83/04/05	1.83354E+01	7.49000E-01	1.00000E+01	
	A(R)	ANGULAR DIST.	63	81/05/25	1.83354E+01	7.49000E-01	1.00000E+01	
	A(R)	ENERGY DEP. TO Y0	8	83/04/05	1.83354E+01	7.49000E-01	1.00000E+01	

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1-N -3
 ATOMIC MASS = 1.016100
 HALF-LIFE = 1.2700E+01 YRS.

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. REACT. RATES	102	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
	P	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	P	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
	T(R)	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
T(R)	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01		
D,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. REACT. RATES	102	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
	D	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	D	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
	T(R)	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
T(R)	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01		
T,COUL.SC		CROSS-SECTION	112	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. REACT. RATES	102	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
	T	ANGULAR DIST.	12	81/02/27	0.	1.0000E-04	2.0000E+01	
	T	ENERGY DEP. TO Y0	4	83/04/05	0.	1.0000E-04	2.0000E+01	
	T(R)	ANGULAR DIST.	12	81/02/27	0.	1.0000E-04	2.0000E+01	
T(R)	ENERGY DEP. TO Y0	9	83/04/05	0.	1.0000E-04	2.0000E+01		
HE3,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	2.0000E+01	
	HE3	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	HE3	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
	T(R)	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	T(R)	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
A,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	2.0000E+01	
	A	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	A	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
	T(R)	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	T(R)	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
P,NUC+INT		CROSS-SECTION	25	79/08/20	0.	6.4000E-02	2.0000E+01	
		MAXM. AV. REACT. RATES	159	80/02/23	0.	6.4000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	0.	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	7	82/05/15	0.	9.0000E-04	2.0000E+01	
	P	ANGULAR DIST.	6	80/06/18	0.	6.4000E-04	2.0000E+01	
	P	ENERGY DEP. TO Y0	12	83/04/05	0.	6.4000E-04	2.0000E+01	
	T(R)	ANGULAR DIST.	6	80/06/18	0.	6.4000E-04	2.0000E+01	
T(R)	ENERGY DEP. TO Y0	18	83/04/05	0.	6.4000E-04	2.0000E+01		
D,NUC+INT		CROSS-SECTION	25	79/08/20	0.	6.4000E-02	2.0000E+01	
		MAXM. AV. REACT. RATES	159	80/02/23	0.	6.4000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	0.	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	7	82/05/15	0.	9.0000E-04	2.0000E+01	
	D	ANGULAR DIST.	6	80/06/18	0.	6.4000E-04	2.0000E+01	
	D	ENERGY DEP. TO Y0	12	83/04/05	0.	6.4000E-04	2.0000E+01	
	T(R)	ANGULAR DIST.	6	80/06/18	0.	6.4000E-04	2.0000E+01	
T(R)	ENERGY DEP. TO Y0	18	83/04/05	0.	6.4000E-04	2.0000E+01		

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1-M-3
 ATOMIC MASS = 3.0161490
 20090 STATE
 HALF-LIFE = 1.2300E+01 YRS.

REACTION	YO	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
		CROSS-SECTION	20	79/08/20	0.	7.2000E-02	2.0000E+01	
		MAXH. AV. REACT. RATES	161	80/02/23	0.	5.2000E-04	1.0000E+00	
		IN-FLT. REACT. X-SECS	20	79/08/20	0.	5.0000E-04	1.0000E+00	
		MAXH. AV. TOT. AV. ENERGY	5	82/05/15	0.	4.4000E-04	1.0000E+00	
D		ANGULAR DIST.	8	80/06/18	0.	2.2000E-04	1.0000E+01	
T(R)		ENERGY DEP. TO YO	22	83/04/05	0.	7.7000E-04	1.0000E+01	
T(R)		ANGULAR DIST.	8	80/06/18	0.	2.2000E-04	1.0000E+01	
T(R)		ENERGY DEP. TO YO	19	83/04/05	0.	7.2000E-04	1.0000E+01	
T,NUC+INT		CROSS-SECTION	17	79/08/20	0.	8.1000E-02	2.0000E+01	
		MAXH. AV. REACT. RATES	162	80/02/23	0.	9.0000E-04	1.0000E+00	
		IN-FLT. REACT. X-SECS	20	79/08/20	0.	9.0000E-04	1.0000E+00	
		MAXH. AV. TOT. AV. ENERGY	4	82/05/15	0.	4.4000E-04	1.0000E+00	
T		ANGULAR DIST.	7	80/06/18	0.	1.1000E-04	1.0000E+01	
T		ENERGY DEP. TO YO	9	83/04/05	0.	1.1000E-04	1.0000E+01	
T(R)		ANGULAR DIST.	7	80/06/18	0.	1.1000E-04	1.0000E+01	
T(R)		ENERGY DEP. TO YO	14	83/04/05	0.	8.1000E-04	1.0000E+01	
HE3,NUC+INT		CROSS-SECTION	23	79/08/20	0.	1.6200E-01	2.0000E+01	
		IN-FLT. REACT. X-SECS	20	79/08/20	0.	0.	1.0000E+00	
HE3		ANGULAR DIST.	7	80/06/18	0.	1.6200E-01	1.0000E+01	
HE3		ENERGY DEP. TO YO	8	83/04/05	0.	1.6200E-01	1.0000E+01	
T(R)		ANGULAR DIST.	7	80/06/18	0.	1.6200E-01	1.0000E+01	
T(R)		ENERGY DEP. TO YO	8	83/04/05	0.	1.6200E-01	1.0000E+01	
A,NUC+INT		CROSS-SECTION	30	79/08/20	0.	1.7916E-01	2.0000E+01	
		IN-FLT. REACT. X-SECS	20	79/08/20	0.	0.	1.0000E+00	
A		ANGULAR DIST.	7	80/06/18	0.	1.7916E-01	1.0000E+01	
A		ENERGY DEP. TO YO	15	83/04/05	0.	1.7916E-01	1.0000E+01	
T(R)		ANGULAR DIST.	7	80/06/18	0.	1.7916E-01	1.0000E+01	
T(R)		ENERGY DEP. TO YO	19	83/04/05	0.	1.7916E-01	1.0000E+01	
P,N'		CROSS-SECTION	28	77/10/15	-7.6400E-01	1.0250E+00	2.0000E+01	
		MAXH. AV. REACT. RATES	88	78/03/02	-7.6400E-01	1.6020E+02	1.0000E+00	
		IN-FLT. REACT. X-SECS	20	77/10/15	-7.6400E-01	0.	1.0000E+00	
		MAXH. AV. TOT. AV. ENERGY	3	82/05/15	-7.6400E-01	1.1400E+02	1.0000E+00	
N		ANGULAR DIST.	35	77/10/15	-7.6400E-01	1.1100E+02	1.0000E+01	
N		ENERGY DEP. TO YO	13	83/04/05	-7.6400E-01	1.0250E+00	1.0000E+01	
N		ENERGY FROM THER. REACT.	9	83/01/30	-7.6400E-01	1.0250E+00	1.0000E+00	
N		MAXH. AV. TOT. AV. E OF PART	9	83/01/30	-7.6400E-01	1.0250E+00	1.0000E+00	
H(R)		ANGULAR DIST.	35	80/07/02	-7.6400E-01	1.0250E+00	1.0000E+01	
H(R)		ENERGY DEP. TO YO	10	83/04/05	-7.6400E-01	1.0250E+00	1.0000E+01	
H(R)		ENERGY FROM THER. REACT.	9	81/07/18	-7.6400E-01	1.0250E+00	1.0000E+00	
H(R)		MAXH. AV. TOT. AV. E OF PART	9	81/07/18	-7.6400E-01	1.0250E+00	1.0000E+00	
D,N'		CROSS-SECTION	87	84/09/30	1.7590E+01	1.0000E-03	2.0000E+01	
		MAXH. AV. REACT. RATES	182	84/09/30	1.7590E+01	1.0000E-04	1.0000E+00	
		IN-FLT. REACT. X-SECS	20	84/09/30	1.7590E+01	1.0000E-12	1.0000E+00	
		MAXH. AV. TOT. AV. ENERGY	18	82/05/15	1.7590E+01	1.0000E-04	1.0000E+00	
N		ANGULAR DIST.	52	77/11/05	1.7590E+01	1.0000E-04	1.0000E+01	
N		ENERGY DEP. TO YO	4	83/04/05	1.7590E+01	1.0000E-04	1.0000E+01	
N		ENERGY FROM THER. REACT.	11	81/07/18	1.7590E+01	1.0000E-04	1.0000E+00	

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1-N 3
 ATOMIC MASS = 23.0161500
 90000 STALS
 HALF-LIFE = 1.2300E+01 YRS.

REACTION	YO	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
D,N'	N	MAXN.AV.TOT.AV.E OF PART	11	81/07/18	1.7590E+01	1.0000E-04	1.0000E+00	
	A(R)	ANGULAR DIST.	52	80/07/02	1.7590E+01	1.0000E-04	1.0000E+01	
	A(R)	ENERGY DEP. TO YO	8	83/04/05	1.7590E+01	1.0000E-04	1.0000E+01	
	A(R)	ENERGY FROM THER. REACT.	11	81/07/18	1.7590E+01	1.0000E-04	1.0000E+00	
T,2N	A(R)	MAXN.AV.TOT.AV.E OF PART	11	81/07/18	1.7590E+01	1.0000E-04	1.0000E+00	
		CROSS-SECTION	57	79/08/20	1.1330E+01	1.0000E-04	2.0000E+01	
		MAXN.AV. REACT. RATES	182	78/03/02	1.1330E+01	1.0000E-04	1.0000E+00	
		IN-FLT REACT. X-SECS	20	79/08/20	1.1330E+01	0.	1.0000E+00	
		MAXN.AV.TOT.AV.ENERGY	19	82/05/15	1.1330E+01	1.0000E-04	1.0000E+00	
	N	ENERGY-ANGLE DIST.	15	80/07/06	1.1330E+01	1.0000E-04	1.0000E+01	
	N	ENERGY DEP. TO YO	7	83/04/05	1.1330E+01	1.0000E-04	1.0000E+01	
	N	ENERGY FROM THER. REACT.	11	85/01/30	1.1330E+01	1.0000E-04	1.0000E+00	
	N	MAXN.AV.TOT.AV.E OF PART	11	85/01/30	1.1330E+01	1.0000E-04	1.0000E+00	
	A(R)	ENERGY-ANGLE DIST.	15	80/07/06	1.1330E+01	1.0000E-04	1.0000E+01	
	A(R)	ENERGY DEP. TO YO	7	83/04/05	1.1330E+01	1.0000E-04	1.0000E+01	
	A(R)	ENERGY FROM THER. REACT.	11	82/05/29	1.1330E+01	1.0000E-04	1.0000E+00	
A(R)	MAXN.AV.TOT.AV.E OF PART	11	82/05/29	1.1330E+01	1.0000E-04	1.0000E+00		
D,GNA		CROSS-SECTION	126	79/10/25	1.7590E+01	1.0000E-03	2.0000E+01	
		MAXN.AV. REACT. RATES	182	78/03/02	1.7590E+01	1.0000E-04	1.0000E+00	
		IN-FLT REACT. X-SECS	20	79/10/25	1.7590E+01	0.	1.0000E+00	
		MAXN.AV.TOT.AV.ENERGY	22	82/05/15	1.7590E+01	1.0000E-04	1.0000E+00	
	N	ENERGY-ANGLE DIST.	18	82/11/15	1.7590E+01	1.0000E-03	1.0000E+01	
	N	ENERGY DEP. TO YO	4	84/11/14	1.7590E+01	1.0000E-04	1.0000E+01	
	N	ENERGY FROM THER. REACT.	11	82/05/29	1.7590E+01	1.0000E-04	1.0000E+00	
	N	MAXN.AV.TOT.AV.E OF PART	11	82/05/29	1.7590E+01	1.0000E-04	1.0000E+00	
	G	ENERGY-ANGLE DIST.	2	80/07/05	1.7590E+01	1.0000E-04	1.0000E+01	
	G	MULTIPLICITY	2	80/07/05	1.7590E+01	1.0000E-04	1.0000E+01	
	G	ENERGY DEP. TO YO	2	82/05/29	1.7590E+01	1.0000E-04	1.0000E+01	
	G	ENERGY FROM THER. REACT.	11	82/05/29	1.7590E+01	1.0000E-04	1.0000E+00	
	G	MULT. FROM THERM. REACT.	2	82/08/04	1.7590E+01	1.0000E-04	1.0000E+00	
	G	MAXN.AV.TOT.AV.E OF PART	11	82/05/29	1.7590E+01	1.0000E-04	1.0000E+00	
	A(R)	ENERGY-ANGLE DIST.	18	82/11/15	1.7590E+01	1.0000E-03	2.0000E+01	
	A(R)	ENERGY DEP. TO YO	10	84/11/14	1.7590E+01	1.0000E-03	2.0000E+01	
	A(R)	ENERGY FROM THER. REACT.	11	85/01/30	1.7590E+01	1.0000E-04	1.0000E+00	
	A(R)	MAXN.AV.TOT.AV.E OF PART	11	85/01/30	1.7590E+01	1.0000E-04	1.0000E+00	
P,G		CROSS-SECTION	26	79/09/27	1.9810E+01	1.0000E-04	2.0000E+01	
		MAXN.AV. REACT. RATES	182	78/03/02	1.9810E+01	1.0000E-04	1.0000E+00	
		IN-FLT REACT. X-SECS	20	79/09/27	1.9810E+01	0.	1.0000E+00	
		MAXN.AV.TOT.AV.ENERGY	20	82/05/15	1.9810E+01	1.0000E-04	1.0000E+00	
	G	ENERGY-ANGLE DIST.	2	80/06/25	1.9810E+01	1.0000E-04	2.0000E+01	
	G	MULTIPLICITY	2	80/06/25	1.9810E+01	1.0000E-04	2.0000E+01	
	G	ENERGY DEP. TO YO	2	83/04/05	1.9810E+01	1.0000E-04	2.0000E+01	
	G	ENERGY FROM THER. REACT.	11	82/05/29	1.9810E+01	1.0000E-04	1.0000E+00	
	G	MULT. FROM THERM. REACT.	2	82/08/04	1.9810E+01	1.0000E-04	1.0000E+00	
	G	MAXN.AV.TOT.AV.E OF PART	11	82/05/29	1.9810E+01	1.0000E-04	1.0000E+00	
	A(R)	ENERGY-ANGLE DIST.	2	80/06/25	1.9810E+01	1.0000E-04	2.0000E+01	
	A(R)	ENERGY DEP. TO YO	2	83/04/05	1.9810E+01	1.0000E-04	2.0000E+01	
A(R)	ENERGY FROM THER. REACT.	11	82/05/29	1.9810E+01	1.0000E-04	1.0000E+00		

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1-N - 3
ATOMIC MASS = 1.01118890
HALF-LIFE = 1.2500E+01 YRS.
QUALIFIER

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P.G		A(R) MAXM.AV.TOT.AV.E OF PART	11	82/05/29	1.9810E+01	1.0000E-04	1.0000E+00	

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 ATOMIC MASS 2.014102 u
 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER	
P,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		MAXM. AV. REACT. RATES	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		IN-FLT REACT. X-SECS	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		MAXM. AV. TOT. AV. ENERGY	109	81/02/27	0.	1.0000E-04	2.0000E-01		
	P		ANGULAR DIST.	109	81/02/27	0.	1.0000E-04	2.0000E-01	
	H(R)		ENERGY DEP. TO Y0	109	81/02/27	0.	1.0000E-04	2.0000E-01	
D,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		MAXM. AV. REACT. RATES	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		IN-FLT REACT. X-SECS	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		MAXM. AV. TOT. AV. ENERGY	109	81/02/27	0.	1.0000E-04	2.0000E-01		
	D		ANGULAR DIST.	109	81/02/27	0.	1.0000E-04	2.0000E-01	
	H(R)		ENERGY DEP. TO Y0	109	81/02/27	0.	1.0000E-04	2.0000E-01	
T,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		MAXM. AV. REACT. RATES	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		IN-FLT REACT. X-SECS	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		MAXM. AV. TOT. AV. ENERGY	109	81/02/27	0.	1.0000E-04	2.0000E-01		
	T		ANGULAR DIST.	109	81/02/27	0.	1.0000E-04	2.0000E-01	
	H(R)		ENERGY DEP. TO Y0	109	81/02/27	0.	1.0000E-04	2.0000E-01	
HE3,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		MAXM. AV. REACT. RATES	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		IN-FLT REACT. X-SECS	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		MAXM. AV. TOT. AV. ENERGY	109	81/02/27	0.	1.0000E-04	2.0000E-01		
	HE3		ANGULAR DIST.	109	81/02/27	0.	1.0000E-04	2.0000E-01	
	H(R)		ENERGY DEP. TO Y0	109	81/02/27	0.	1.0000E-04	2.0000E-01	
A,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		MAXM. AV. REACT. RATES	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		IN-FLT REACT. X-SECS	109	81/02/27	0.	1.0000E-04	2.0000E-01		
		MAXM. AV. TOT. AV. ENERGY	109	81/02/27	0.	1.0000E-04	2.0000E-01		
	A		ANGULAR DIST.	109	81/02/27	0.	1.0000E-04	2.0000E-01	
	H(R)		ENERGY DEP. TO Y0	109	81/02/27	0.	1.0000E-04	2.0000E-01	
P,NUC+INT		CROSS-SECTION	122	79/08/20	0.	1.0000E-01	2.0000E-01		
		MAXM. AV. REACT. RATES	122	79/08/20	0.	1.0000E-01	2.0000E-01		
		IN-FLT REACT. X-SECS	122	79/08/20	0.	1.0000E-01	2.0000E-01		
		MAXM. AV. TOT. AV. ENERGY	122	79/08/20	0.	1.0000E-01	2.0000E-01		
	P		ANGULAR DIST.	122	79/08/20	0.	1.0000E-01	2.0000E-01	
	H(R)		ENERGY DEP. TO Y0	122	79/08/20	0.	1.0000E-01	2.0000E-01	

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ATOMIC MASS 2.014102
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 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P,NUC+INT	H(R)	ENERGY DEP. TO Y0	19	83/04/05	0.	1.2800E-01	2.0000E+01	
D,NUC+INT		CROSS-SECTION	20	79/08/20	0.	.4400E-01	.0000E+01	
		MAXM. AV. REACT. RATES	146	80/02/23	0.	.0200E-03	.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	.0000E-01	.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	6	82/05/15	0.	.0000E-01	.0000E+01	
	D	ANGULAR DIST.	7	80/06/18	0.	.0000E-01	.0000E+01	
	H(R)	ENERGY DEP. TO Y0	20	83/04/05	0.	.4400E-01	.0000E+01	
T,NUC+INT	H(R)	ANGULAR DIST.	7	80/06/18	0.	.0000E-01	.0000E+01	
	H(R)	ENERGY DEP. TO Y0	18	83/04/05	0.	.4400E-01	.0000E+01	
		CROSS-SECTION	23	79/08/20	0.	.5200E-01	.0000E+01	
		MAXM. AV. REACT. RATES	140	80/02/23	0.	.0000E-04	.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	.0000E-01	.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	6	82/05/15	0.	.0000E-01	.0000E+01	
	I	ANGULAR DIST.	7	80/06/18	0.	.0000E-01	.0000E+01	
	H(R)	ENERGY DEP. TO Y0	20	83/04/05	0.	.0000E-01	.0000E+01	
	H(R)	ANGULAR DIST.	7	80/06/18	0.	.0000E-01	.0000E+01	
HE3,NUC+INT	H(R)	ENERGY DEP. TO Y0	8	83/04/05	0.	.0000E-01	.0000E+01	
		CROSS-SECTION	18	79/08/20	0.	.2800E-01	.0000E+01	
		MAXM. AV. REACT. RATES	131	80/02/23	0.	.0200E-03	.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	.0000E-01	.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	4	82/05/15	0.	.0000E-01	.0000E+01	
	HE3	ANGULAR DIST.	7	80/06/18	0.	.0000E-01	.0000E+01	
	HE3	ENERGY DEP. TO Y0	9	83/04/05	0.	.0000E-01	.0000E+01	
	H(R)	ANGULAR DIST.	7	80/06/18	0.	.0000E-01	.0000E+01	
A,NUC+INT	H(R)	ENERGY DEP. TO Y0	14	83/04/05	0.	.0000E-01	.0000E+01	
		CROSS-SECTION	22	79/08/20	0.	.5832E-01	.0000E+01	
	A	IN-FLT REACT. X-SECS	20	79/08/20	0.	.0000E-01	.0000E+01	
	A	ANGULAR DIST.	4	80/06/18	0.	.0000E-01	.0000E+01	
	H(R)	ENERGY DEP. TO Y0	11	83/04/05	0.	.0000E-01	.0000E+01	
T,N'P	H(R)	ANGULAR DIST.	14	80/06/18	0.	.0000E-01	.0000E+01	
	H(R)	ENERGY DEP. TO Y0	17	83/04/05	0.	.0000E-01	.0000E+01	
		CROSS-SECTION	16	85/06/19	1	1.0000E-01	.0000E+01	
		MAXM. AV. REACT. RATES	157	85/02/21	1	.0000E-04	.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	1	.0000E-01	.0000E+01	
		ENERGY-ANGLE DIST.	1	85/06/19	1	.0000E-01	.0000E+01	
		ENERGY DEP. TO Y0	1	85/06/19	1	.0000E-01	.0000E+01	
		ENERGY-ANGLE DIST.	1	85/06/19	1	.0000E-01	.0000E+01	
		ENERGY DEP. TO Y0	1	85/06/19	1	.0000E-01	.0000E+01	
		ENERGY-ANGLE DIST.	1	85/06/19	1	.0000E-01	.0000E+01	
		ENERGY DEP. TO Y0	1	85/06/19	1	.0000E-01	.0000E+01	
T,N'P	A(R)	ENERGY-ANGLE DIST.	1	85/06/19	1	.0000E-01	.0000E+01	
	A(R)	ENERGY DEP. TO Y0	1	85/06/19	1	.0000E-01	.0000E+01	
		CROSS-SECTION	16	85/06/19	1	1.0000E-01	.0000E+01	
		MAXM. AV. REACT. RATES	157	85/02/21	1	.0000E-04	.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	1	.0000E-01	.0000E+01	
		ANGULAR DIST.	1	85/06/19	1	.0000E-01	.0000E+01	
		ENERGY DEP. TO Y0	1	85/06/19	1	.0000E-01	.0000E+01	

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ATOMIC MASS 2-HE-3
 2-HE-3 STABLE
 2-HE-3 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
T,N'P	P	ENERGY-ANGLE DIST.	5	85/07/07	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	P	ENERGY DEP. TO Y0	5	85/07/07	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	A(R)	ENERGY-ANGLE DIST.	5	85/07/07	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	A(R)	ENERGY DEP. TO Y0	5	85/07/07	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
T,PN'		CROSS-SECTION	4	85/06/03	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
		MAXM. AV. REACT. RATES	154	85/02/23	1.20977E+01	1.00000E-04	1.00000E+01	LEVEL 0.
		IN-FLT REACT. X-SECS	20	85/06/03	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	N	ENERGY-ANGLE DIST.	5	85/07/07	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	N	ENERGY DEP. TO Y0	5	85/07/07	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	P	ANGULAR DIST.	5	85/06/03	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	P	ENERGY DEP. TO Y0	5	85/07/07	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	A(R)	ENERGY-ANGLE DIST.	5	85/07/07	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	A(R)	ENERGY DEP. TO Y0	5	85/07/07	1.20977E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	D,P		CROSS-SECTION	127	74/09/10	1.84444E+01	1.00000E-03	1.00000E+01	LEVEL 0.
		MAXM. AV. REACT. RATES	181	78/03/02	1.84444E+01	1.00000E-04	1.00000E+01	LEVEL 0.
		IN-FLT REACT. X-SECS	20	74/09/10	1.84444E+01	1.00000E-01	1.00000E+01	LEVEL 0.
		MAXM. AV. TOT. AV. ENERGY	21	82/05/15	1.84444E+01	1.00000E-04	1.00000E+01	LEVEL 0.
P		ANGULAR DIST.	63	77/11/05	1.84444E+01	1.00000E-01	1.00000E+01	LEVEL 0.
P		ENERGY DEP. TO Y0	4	83/04/05	1.84444E+01	1.00000E-01	1.00000E+01	LEVEL 0.
P		ENERGY FROM THER. REACT.	11	81/07/18	1.84444E+01	1.00000E-04	1.00000E+01	LEVEL 0.
P		MAXM. AV. TOT. AV. E OF PART	11	81/07/18	1.84444E+01	1.00000E-04	1.00000E+01	LEVEL 0.
A(R)		ANGULAR DIST.	63	80/07/02	1.84444E+01	1.00000E-01	1.00000E+01	LEVEL 0.
A(R)		ENERGY DEP. TO Y0	8	83/04/05	1.84444E+01	1.00000E-01	1.00000E+01	LEVEL 0.
A(R)		ENERGY FROM THER. REACT.	11	81/07/18	1.84444E+01	1.00000E-04	1.00000E+01	LEVEL 0.
A(R)		MAXM. AV. TOT. AV. E OF PART	11	81/07/18	1.84444E+01	1.00000E-04	1.00000E+01	LEVEL 0.
T,D		CROSS-SECTION	9	85/05/21	1.45200E+01	1.00000E-01	1.00000E+01	LEVEL 0.
		MAXM. AV. REACT. RATES	161	85/02/23	1.45200E+01	1.00000E-04	1.00000E+01	LEVEL 0.
		IN-FLT REACT. X-SECS	20	85/05/21	1.45200E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	D	ANGULAR DIST.	4	85/05/21	1.45200E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	D	ENERGY DEP. TO Y0	2	85/07/07	1.45200E+01	1.00000E-01	1.00000E+01	LEVEL 0.
	A(R)	ANGULAR DIST.	4	85/05/21	1.45200E+01	1.00000E-01	1.00000E+01	LEVEL 0.
A(R)	ENERGY DEP. TO Y0	5	85/07/07	1.45200E+01	1.00000E-01	1.00000E+01	LEVEL 0.	

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 2-HE-4
 ATOMIC MASS 2.014102
 CROSS STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E-01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E-01	
	P	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E-01	
	P	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E-01	
	A(R)	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E-01	
A(R)	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E-01		
D,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E-01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E-01	
	D	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E-01	
	D	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E-01	
	A(R)	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E-01	
A(R)	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E-01		
T,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E-01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E-01	
	T	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E-01	
	T	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E-01	
	A(R)	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E-01	
A(R)	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E-01		
HE3,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E-01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E-01	
	HE3	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E-01	
	HE3	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E-01	
	A(R)	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E-01	
A(R)	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E-01		
A,COUL.SC		CROSS-SECTION	108	81/02/27	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E-01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E-01	
	A	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E-01	
	A	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E-01	
	A(R)	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E-01	
A(R)	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E-01		
P,NUC+INT		CROSS-SECTION	33	79/05/20	0.	1.1500E-01	2.0000E-01	
		MAXW. AV. REACT. RATES	140	80/02/23	0.	1.4000E-04	2.0000E-01	
		IN-FLT REACT. X-SECS	20	79/05/20	0.	1.0000E-04	2.0000E-01	
		MAXW. AV. TOT. AV. ENERGY	7	82/05/15	0.	1.0000E-04	2.0000E-01	
	P	ANGULAR DIST.	7	80/06/18	0.	1.1500E-01	2.0000E-01	

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 2-NE-4
 ATOMIC MASS 2.0140308
 GREEN STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P,NUC+INT	P	ENERGY DEP. TO Y0	15	83/04/05	0.	1.15000E-01	2.00000E+01	
	A(R)	ANGULAR DIST.	7	80/06/18	0.	1.15000E-01	2.00000E+01	
	A(R)	ENERGY DEP. TO Y0	23	83/04/05	0.	1.15000E-01	2.00000E+01	
D,NUC+INT		CROSS-SECTION	34	79/08/20	0.	1.15000E-01	2.00000E+01	
		MAXM. AV. REACT. RATES	146	80/02/23	0.	1.15000E-01	2.00000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	1.15000E-01	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	7	82/05/15	0.	1.15000E-01	2.00000E+01	
	D	ANGULAR DIST.	18	80/06/18	0.	1.15000E-01	2.00000E+01	
	D	ENERGY DEP. TO Y0	26	83/04/05	0.	1.15000E-01	2.00000E+01	
	A(R)	ANGULAR DIST.	18	80/06/18	0.	1.15000E-01	2.00000E+01	
	A(R)	ENERGY DEP. TO Y0	27	83/04/05	0.	1.15000E-01	2.00000E+01	
T,NUC+INT		CROSS-SECTION	31	79/08/20	0.	1.15000E-01	2.00000E+01	
		MAXM. AV. REACT. RATES	141	80/02/23	0.	1.15000E-01	2.00000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	1.15000E-01	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	6	82/05/15	0.	1.15000E-01	2.00000E+01	
	T	ANGULAR DIST.	7	80/06/18	0.	1.15000E-01	2.00000E+01	
	T	ENERGY DEP. TO Y0	15	83/04/05	0.	1.15000E-01	2.00000E+01	
	A(R)	ANGULAR DIST.	7	80/06/18	0.	1.15000E-01	2.00000E+01	
	A(R)	ENERGY DEP. TO Y0	20	83/04/05	0.	1.15000E-01	2.00000E+01	
HE3,NUC+INT		CROSS-SECTION	22	79/08/20	0.	2.70000E-01	2.00000E+01	
		MAXM. AV. REACT. RATES	132	80/02/23	0.	2.70000E-01	2.00000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	2.70000E-01	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	5	82/05/15	0.	2.70000E-01	2.00000E+01	
	HE3	ANGULAR DIST.	4	80/06/18	0.	2.70000E-01	2.00000E+01	
	HE3	ENERGY DEP. TO Y0	13	83/04/05	0.	2.70000E-01	2.00000E+01	
	A(R)	ANGULAR DIST.	4	80/06/18	0.	2.70000E-01	2.00000E+01	
	A(R)	ENERGY DEP. TO Y0	17	83/04/05	0.	2.70000E-01	2.00000E+01	
A,NUC+INT		CROSS-SECTION	29	79/08/20	0.	2.95000E-01	2.00000E+01	
		MAXM. AV. REACT. RATES	133	80/02/23	0.	2.95000E-01	2.00000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	0.	2.95000E-01	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	7	82/05/15	0.	2.95000E-01	2.00000E+01	
	A	ANGULAR DIST.	6	80/06/18	0.	2.95000E-01	2.00000E+01	
	A	ENERGY DEP. TO Y0	10	83/04/05	0.	2.95000E-01	2.00000E+01	
	A(R)	ANGULAR DIST.	6	80/06/18	0.	2.95000E-01	2.00000E+01	
	A(R)	ENERGY DEP. TO Y0	14	83/04/05	0.	2.95000E-01	2.00000E+01	

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ATOMIC MASS 2.01410176
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 GROUND STATE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P, COUL. SC	P	CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E+01	
D, COUL. SC	D	CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E+01	
T, COUL. SC	T	CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E+01	
HE3, COUL. SC	HE3	CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E+01	
A, COUL. SC	A	CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E+01	
D, N'	N	CROSS-SECTION	101	81/07/05	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. REACT. RATES	172	80/02/23	0.	1.00000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E+01	
N	N	CROSS-SECTION	111	81/07/05	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. REACT. RATES	172	80/02/23	0.	1.00000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E+01	
N	N	CROSS-SECTION	111	81/07/05	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. REACT. RATES	172	80/02/23	0.	1.00000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E+01	

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 ATOMIC MASS 2.0041018
 STABLE

REACTION	YO	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
D,N'	G	ENERGY DEP. TO YO	11	83/04/05	3.3820E+00	1.0000E-03	2.0000E+01	
T,2N		CROSS-SECTION	16	74/09/10	8.8700E+00	4.3100E+00	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	8.8700E+00	4.3100E+00	2.0000E+01	
		MAXN. AV. REACT. RATES	69	78/03/02	8.8700E+00	4.4020E+00	2.0000E+01	
		IN-FLT REACT. X-SECS	20	74/09/10	8.8700E+00	4.4020E+00	2.0000E+01	
		MAXN. AV. AV. E OF RESIDUAL	5	85/01/30	8.8700E+00	4.4000E+00	2.0000E+01	
		MAXN. AV. TOT. AV. ENERGY	2	82/05/15	8.8700E+00	4.4000E+00	2.0000E+01	
	N	ENERGY-ANGLE DIST.	6	81/04/22	8.8700E+00	4.3100E+00	2.0000E+01	
	N	ENERGY DEP. TO YO	2	83/04/05	8.8700E+00	4.3100E+00	2.0000E+01	
	N	ENERGY FROM THER. REACT.	5	82/05/29	8.8700E+00	4.4000E+00	2.0000E+01	
	N	MAXN. AV. TOT. AV. E OF PART	2	82/05/29	8.8700E+00	4.4000E+00	2.0000E+01	
	G	ENERGY DEP. TO YO	6	83/04/05	8.8700E+00	4.3100E+00	2.0000E+01	
D,N' HE3		CROSS-SECTION	7	85/08/19	1.7960E+00	1.0000E-03	2.0000E+01	
		MAXN. AV. REACT. RATES	182	80/02/23	1.7960E+00	1.0000E-03	2.0000E+01	
		IN-FLT REACT. X-SECS	20	85/08/19	1.7960E+00	1.0000E-03	2.0000E+01	
	N	ENERGY-ANGLE DIST.	7	85/08/19	1.7960E+00	1.0000E-03	2.0000E+01	
	N	ENERGY DEP. TO YO	7	85/09/11	1.7960E+00	1.0000E-03	2.0000E+01	
	HE3	ENERGY-ANGLE DIST.	7	85/08/19	1.7960E+00	1.0000E-03	2.0000E+01	
	HE3	ENERGY DEP. TO YO	7	85/09/11	1.7960E+00	1.0000E-03	2.0000E+01	
	A(R)	ENERGY-ANGLE DIST.	7	85/08/19	1.7960E+00	1.0000E-03	2.0000E+01	
	A(R)	ENERGY DEP. TO YO	2	85/09/11	1.7960E+00	1.0000E-03	2.0000E+01	
T,N'A		CROSS-SECTION	12	84/11/26	1.6118E+01	1.0000E-03	2.0000E+01	
		MAXN. AV. REACT. RATES	182	84/11/26	1.6118E+01	1.0000E-03	2.0000E+01	
		IN-FLT REACT. X-SECS	20	84/11/26	1.6118E+01	1.0000E-03	2.0000E+01	
	N	ANGULAR DIST.	7	84/11/26	1.6118E+01	1.0000E-03	2.0000E+01	
	N	ENERGY DEP. TO YO	4	85/09/11	1.6118E+01	1.0000E-03	2.0000E+01	
	A	ENERGY-ANGLE DIST.	4	84/11/30	1.6118E+01	1.0000E-03	2.0000E+01	
	A	ENERGY DEP. TO YO	6	85/09/11	1.6118E+01	1.0000E-03	2.0000E+01	
	A(R)	ENERGY-ANGLE DIST.	6	84/11/30	1.6118E+01	1.0000E-03	2.0000E+01	
	A(R)	ENERGY DEP. TO YO	2	85/09/11	1.6118E+01	1.0000E-03	2.0000E+01	
D,TP		CROSS-SECTION	106	74/09/10	2.5350E+00	1.0000E-03	2.0000E+01	
		MAXN. AV. REACT. RATES	171	78/03/02	2.5350E+00	1.2000E-03	2.0000E+01	
		IN-FLT REACT. X-SECS	20	74/09/10	2.5350E+00	1.2000E-03	2.0000E+01	
		MAXN. AV. TOT. AV. ENERGY	21	82/05/15	2.5350E+00	1.4000E+00	2.0000E+01	
	P	ENERGY-ANGLE DIST.	8	81/07/06	2.5350E+00	1.4000E+00	2.0000E+01	
	P	ENERGY DEP. TO YO	6	85/09/11	2.5350E+00	1.4000E+00	2.0000E+01	
	P	ENERGY FROM THER. REACT.	11	85/01/30	2.5350E+00	1.4000E+00	2.0000E+01	
	P	MAXN. AV. TOT. AV. E OF PART	11	85/01/30	2.5350E+00	1.4000E+00	2.0000E+01	
	I	ENERGY-ANGLE DIST.	8	81/07/06	2.5350E+00	1.4000E+00	2.0000E+01	
	I	ENERGY DEP. TO YO	6	85/09/11	2.5350E+00	1.4000E+00	2.0000E+01	
	I	ENERGY FROM THER. REACT.	11	82/05/29	2.5350E+00	1.4000E+00	2.0000E+01	
	I	MAXN. AV. TOT. AV. E OF PART	11	82/05/29	2.5350E+00	1.4000E+00	2.0000E+01	
	A(R)	ENERGY-ANGLE DIST.	8	81/07/06	2.5350E+00	1.4000E+00	2.0000E+01	
	A(R)	ENERGY DEP. TO YO	6	85/09/11	2.5350E+00	1.4000E+00	2.0000E+01	
	A(R)	ENERGY FROM THER. REACT.	11	82/05/29	2.5350E+00	1.4000E+00	2.0000E+01	
	A(R)	MAXN. AV. TOT. AV. E OF PART	11	82/05/29	2.5350E+00	1.4000E+00	2.0000E+01	

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ATOMIC MASS 3-11-4
 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P P P P P G		CROSS-SECTION	93	74/09/10	.0270E+00	0.0000E-04	0.0000E+01	
		ENERGY DEP. RESIDUAL	6	85/09/11	.0270E+00	0.0000E-04	0.0000E+01	
		MAXH. AV. REACT. RATES	172	78/03/02	.0270E+00	0.0000E-04	0.0000E+01	
		IN-FLT REACT. X-SECS	20	74/09/10	.0270E+00	0.0000E-04	0.0000E+01	
		MAXH. AV. AV. E OF RESIDUAL	11	82/05/29	.0270E+00	0.0000E-04	0.0000E+01	
		MAXH. AV. TOT. AV. ENERGY	20	82/05/15	.0270E+00	0.0000E-04	0.0000E+01	
		ENERGY-ANGLE DIST.	12	81/06/02	.0270E+00	0.0000E-04	0.0000E+01	
		ENERGY DEP. TO Y0	8	85/09/11	.0270E+00	0.0000E-04	0.0000E+01	
		ENERGY FROM THER. REACT.	11	82/05/29	.0270E+00	0.0000E-04	0.0000E+01	
		MAXH. AV. TOT. AV. E OF PART	11	82/05/29	.0270E+00	0.0000E-04	0.0000E+01	
	ENERGY DEP. TO Y0	10	85/09/11	.0270E+00	0.0000E-04	0.0000E+01		
A,P		CROSS-SECTION	6	85/05/20	.1250E+00	0.0000E-00	0.0000E+01	
		ENERGY DEP. RESIDUAL	6	85/07/07	.1250E+00	0.0000E-00	0.0000E+01	
		MAXH. AV. REACT. RATES	83	80/02/23	.1250E+00	0.0000E-00	0.0000E+01	
		IN-FLT REACT. X-SECS	20	85/05/20	.1250E+00	0.0000E-00	0.0000E+01	
		ANGULAR DIST.	4	85/05/20	.1250E+00	0.0000E-00	0.0000E+01	
T,D		ENERGY DEP. TO Y0	6	85/07/07	.1250E+00	0.0000E-00	0.0000E+01	
		CROSS-SECTION	5	84/11/20	9.9400E-01	0.0000E-01	0.0000E+01	
D D		ENERGY DEP. RESIDUAL	5	85/09/11	9.9400E-01	0.0000E-01	0.0000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	9.9400E-01	0.0000E-01	0.0000E+01	
		IN-FLT REACT. X-SECS	20	84/11/20	9.9400E-01	0.0000E-01	0.0000E+01	
		ANGULAR DIST.	4	84/11/20	9.9400E-01	0.0000E-01	0.0000E+01	
		ENERGY DEP. TO Y0	4	85/09/11	9.9400E-01	0.0000E-01	0.0000E+01	
T,D		CROSS-SECTION	5	84/11/20	9.9400E-01	0.0000E-01	0.0000E+01	
		ENERGY DEP. RESIDUAL	5	85/09/11	9.9400E-01	0.0000E-01	0.0000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	9.9400E-01	0.0000E-01	0.0000E+01	
		IN-FLT REACT. X-SECS	20	84/11/20	9.9400E-01	0.0000E-01	0.0000E+01	
		ANGULAR DIST.	4	84/11/20	9.9400E-01	0.0000E-01	0.0000E+01	
D D G		ENERGY DEP. TO Y0	5	84/11/20	9.9400E-01	0.0000E-01	0.0000E+01	
		ENERGY DEP. TO Y0	4	85/09/11	9.9400E-01	0.0000E-01	0.0000E+01	
		ENERGY DEP. TO Y0	2	85/09/11	9.9400E-01	0.0000E-01	0.0000E+01	
		CROSS-SECTION	24	79/01/29	1.1000E-01	0.0000E-01	0.0000E+01	
		ENERGY DEP. RESIDUAL	11	85/09/11	1.1000E-01	0.0000E-01	0.0000E+01	
D D D D G		MAXH. AV. REACT. RATES	123	78/03/02	1.1000E-01	0.0000E-01	0.0000E+01	
		IN-FLT REACT. X-SECS	20	79/01/29	1.1000E-01	0.0000E-01	0.0000E+01	
		MAXH. AV. AV. E OF RESIDUAL	9	82/05/29	1.1000E-01	0.0000E-01	0.0000E+01	
		MAXH. AV. TOT. AV. ENERGY	11	82/05/15	1.1000E-01	0.0000E-01	0.0000E+01	
		ENERGY-ANGLE DIST.	12	81/06/02	1.1000E-01	0.0000E-01	0.0000E+01	
		ENERGY DEP. TO Y0	12	85/09/11	1.1000E-01	0.0000E-01	0.0000E+01	
		ENERGY FROM THER. REACT.	9	82/05/29	1.1000E-01	0.0000E-01	0.0000E+01	
		MAXH. AV. TOT. AV. E OF PART	9	82/05/29	1.1000E-01	0.0000E-01	0.0000E+01	
		ENERGY DEP. TO Y0	12	85/09/11	1.1000E-01	0.0000E-01	0.0000E+01	
		CROSS-SECTION	78	79/08/20	4.0200E+00	0.0000E-04	0.0000E+01	
P,HE3		MAXH. AV. REACT. RATES	177	78/03/02	4.0200E+00	0.0000E-04	0.0000E+01	
		IN-FLT REACT. X-SECS	20	79/08/20	4.0200E+00	0.0000E-04	0.0000E+01	
		MAXH. AV. TOT. AV. ENERGY	28	82/05/15	4.0200E+00	0.0000E-04	0.0000E+01	
		ANGULAR DIST.	2	81/04/21	4.0200E+00	0.0000E-04	0.0000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	4.0200E+00	0.0000E-04	0.0000E+01	

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3-LI-6
 ATOMIC MASS 2.015100
 CROSS STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P, HE3	HE3	ENERGY FROM THER. REACT.	11	81/07/18	4.02000E+00	1.00000E-04	1.00000E+00	
	HE3	MAXM. AV. TOT. AV. E OF PART	11	81/07/18	4.02000E+00	1.00000E-04	1.00000E+00	
	A(R)	ANGULAR DIST.	2	81/04/21	4.02000E+00	1.00000E-04	1.00000E+00	
	A(R)	ENERGY DEP. TO Y0	2	83/04/05	4.02000E+00	1.00000E-04	1.00000E+00	
	A(R)	ENERGY FROM THER. REACT.	11	81/07/18	4.02000E+00	1.00000E-04	1.00000E+00	
D, A	A(R)	MAXM. AV. TOT. AV. E OF PART	11	81/07/18	4.02000E+00	1.00000E-04	1.00000E+00	
		CROSS-SECTION	91	74/09/10	2.2374E+01	1.00000E-03	2.00000E+01	
		MAXM. AV. REACT. RATES	171	73/03/02	2.2374E+01	1.00000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	74/09/10	2.2374E+01	1.00000E-04	2.00000E+01	
		MAXM. AV. TOT. AV. ENERGY	22	82/05/15	2.2374E+01	1.00000E-04	2.00000E+01	
	A	ANGULAR DIST.	2	81/04/21	2.2374E+01	1.00000E-04	2.00000E+01	
	A	ENERGY DEP. TO Y0	2	83/04/05	2.2374E+01	1.00000E-04	2.00000E+01	
	A	ENERGY FROM THER. REACT.	11	81/07/18	2.2374E+01	1.00000E-04	2.00000E+01	
	A	MAXM. AV. TOT. AV. E OF PART	11	81/07/18	2.2374E+01	1.00000E-04	2.00000E+01	
	A(R)	ANGULAR DIST.	2	81/04/21	2.2374E+01	1.00000E-04	2.00000E+01	
	A(R)	ENERGY DEP. TO Y0	2	83/04/05	2.2374E+01	1.00000E-04	2.00000E+01	
A, DA	A(R)	ENERGY FROM THER. REACT.	11	81/07/18	2.2374E+01	1.00000E-04	2.00000E+01	
	A(R)	MAXM. AV. TOT. AV. E OF PART	11	81/07/18	2.2374E+01	1.00000E-04	2.00000E+01	
		CROSS-SECTION	6	86/04/16	1.4730E+00	1.00000E-02	2.00000E+01	
		MAXM. AV. REACT. RATES	206	85/04/16	1.4730E+00	1.00000E-02	2.00000E+01	
		IN-FLT REACT. X-SECS	20	85/04/16	1.4730E+00	1.00000E-02	2.00000E+01	
D, A	D	ANGULAR DIST.	2	85/04/16	1.4730E+00	1.00000E-02	2.00000E+01	
	D	ENERGY DEP. TO Y0	2	85/04/16	1.4730E+00	1.00000E-02	2.00000E+01	
	A	ENERGY-ANGLE DIST.	6	86/04/16	1.4730E+00	1.00000E-02	2.00000E+01	
	A	ENERGY DEP. TO Y0	6	86/04/16	1.4730E+00	1.00000E-02	2.00000E+01	
	A(R)	ENERGY-ANGLE DIST.	6	86/04/16	1.4730E+00	1.00000E-02	2.00000E+01	
A, DA	A(R)	ENERGY DEP. TO Y0	6	86/04/16	1.4730E+00	1.00000E-02	2.00000E+01	
		CROSS-SECTION	4	85/04/16	1.4730E+00	7.4400E+00	2.00000E+01	
		MAXM. AV. REACT. RATES	70	85/04/16	1.4730E+00	7.4400E+00	2.00000E+01	
		IN-FLT REACT. X-SECS	20	85/04/16	1.4730E+00	7.4400E+00	2.00000E+01	
	D	ANGULAR DIST.	4	85/04/16	1.4730E+00	7.4400E+00	2.00000E+01	
HE3, PA	D	ENERGY DEP. TO Y0	11	85/04/16	1.4730E+00	7.4400E+00	2.00000E+01	
	A	ENERGY-ANGLE DIST.	4	85/04/16	1.4730E+00	7.4400E+00	2.00000E+01	
	A	ENERGY DEP. TO Y0	4	85/04/16	1.4730E+00	7.4400E+00	2.00000E+01	
	A(R)	ENERGY-ANGLE DIST.	4	85/04/16	1.4730E+00	7.4400E+00	2.00000E+01	
	A(R)	ENERGY DEP. TO Y0	4	85/04/16	1.4730E+00	7.4400E+00	2.00000E+01	
P		CROSS-SECTION	15	85/08/22	1.6888E+01	1.00000E-03	2.00000E+01	
		MAXM. AV. REACT. RATES	132	80/02/23	1.6888E+01	1.00000E-04	2.00000E+01	
		IN-FLT REACT. X-SECS	20	85/08/22	1.6888E+01	1.00000E-03	2.00000E+01	
	P	ENERGY-ANGLE DIST.	2	85/08/22	1.6888E+01	1.00000E-03	2.00000E+01	
	P	ENERGY DEP. TO Y0	2	85/09/11	1.6888E+01	1.00000E-03	2.00000E+01	
	A	ENERGY-ANGLE DIST.	2	85/08/22	1.6888E+01	1.00000E-03	2.00000E+01	
	A	ENERGY DEP. TO Y0	2	85/09/11	1.6888E+01	1.00000E-03	2.00000E+01	
	A(R)	ENERGY-ANGLE DIST.	2	85/08/22	1.6888E+01	1.00000E-03	2.00000E+01	
	A(R)	ENERGY DEP. TO Y0	2	85/09/11	1.6888E+01	1.00000E-03	2.00000E+01	

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3-LI-7
 ATOMIC MASS = 7.0160040
 GROUP 3
 STABLE

REACTION	YO	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P,COUL.SC	P	CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
		ANGULAR DIST. ENERGY DEP. TO YO	2	83/04/05	0.	1.0000E-04	2.0000E+01	
D,COUL.SC	D	CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
		ANGULAR DIST. ENERGY DEP. TO YO	2	83/04/05	0.	1.0000E-04	2.0000E+01	
T,COUL.SC	T	CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
		ANGULAR DIST. ENERGY DEP. TO YO	2	83/04/05	0.	1.0000E-04	2.0000E+01	
HE3,COUL.SC	HE3	CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
		ANGULAR DIST. ENERGY DEP. TO YO	2	83/04/05	0.	1.0000E-04	2.0000E+01	
A,COUL.SC	A	CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
		ANGULAR DIST. ENERGY DEP. TO YO	2	83/04/05	0.	1.0000E-04	2.0000E+01	
P,N'	N	CROSS-SECTION	19	70/12/02	1.644000E+00	1.888000E+00	2.000000E+01	
		ENERGY DEP. RESIDUAL	9	83/04/05	1.111111E+00	1.111111E+00	1.111111E+00	
		MAXM. AV. REACT. RATES	81	78/03/03	1.111111E+00	1.111111E+00	1.111111E+00	
		IN-FLT REACT. X-SECS	20	70/12/02	1.111111E+00	1.111111E+00	1.111111E+00	
		MAXM. AV. AV. E. OF RESIDUAL	6	70/12/02	1.111111E+00	1.111111E+00	1.111111E+00	
		ANGULAR DIST. ENERGY DEP. TO YO	2	83/04/05	1.111111E+00	1.111111E+00	1.111111E+00	
N,N	N	ENERGY DEP. TO YO	10	83/04/05	1.111111E+00	1.111111E+00	1.111111E+00	
		ENERGY FROM THER. REACT.	6	83/04/05	1.111111E+00	1.111111E+00	1.111111E+00	
		MAXM. AV. TOT. AV. E. OF PART	6	83/04/05	1.111111E+00	1.111111E+00	1.111111E+00	
			2	83/04/05	1.111111E+00	1.111111E+00	1.111111E+00	
			2	83/04/05	1.111111E+00	1.111111E+00	1.111111E+00	
			2	83/04/05	1.111111E+00	1.111111E+00	1.111111E+00	

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ATOMIC MASS 2.0140640
3-LI-7
ORGANIC STABLE

REACTION	YO	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P,N'	G	ENERGY DEP. TO Y0	9	83/04/05	-1.6400E+00	1.8800E+00	2.0000E+01	
T,N'		CROSS-SECTION	14	85/01/22	1.0439E+01	1.0000E-03	1.0000E+01	
		ENERGY DEP. RESIDUAL	10	85/04/16	1.0439E+01	1.0000E-03	1.0000E+01	
		MAXN. AV. REACT. RATES	182	80/02/23	1.0439E+01	1.0000E-04	1.0000E+01	
		IN-FLT REACT. X-SECS	20	85/01/22	1.0439E+01	1.0000E-03	1.0000E+01	
	N	ANGULAR DIST.	9	85/01/22	1.0439E+01	1.0000E-03	1.0000E+01	
	N	ENERGY DEP. TO Y0	3	85/04/16	1.0439E+01	1.0000E-03	1.0000E+01	
D,2N		CROSS-SECTION	16	81/07/05	1.5600E+00	4.9700E-03	1.0000E+01	
		ENERGY DEP. RESIDUAL	22	83/04/05	1.5600E+00	4.9700E-03	1.0000E+01	
		MAXN. AV. REACT. RATES	60	78/03/02	1.5600E+00	4.9700E-03	1.0000E+01	
		IN-FLT REACT. X-SECS	20	70/12/02	1.5600E+00	4.9700E-03	1.0000E+01	
		MAXN. AV. AV. E OF RESIDUAL	2	85/01/30	1.5600E+00	4.9700E-03	1.0000E+01	
		MAXN. AV. TOT. AV. ENERGY	2	82/05/19	1.5600E+00	4.9700E-03	1.0000E+01	
	N	ENERGY-ANGLE DIST.	6	81/04/22	1.5600E+00	4.9700E-03	1.0000E+01	
	N	ENERGY DEP. TO Y0	4	83/04/05	1.5600E+00	4.9700E-03	1.0000E+01	
	N	ENERGY FROM THER. REACT.	4	82/05/29	1.5600E+00	4.9700E-03	1.0000E+01	
	N	MAXN. AV. TOT. AV. E OF PART	4	82/05/29	1.5600E+00	4.9700E-03	1.0000E+01	
	G	ENERGY DEP. TO Y0	6	83/04/05	1.5600E+00	4.9700E-03	1.0000E+01	
T,3N		CROSS-SECTION	2	70/12/02	-1.0100E-01	1.4470E+01	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	85/04/16	-1.0100E-01	1.4470E+01	2.0000E+01	
		MAXN. AV. REACT. RATES	38	78/03/02	-1.0100E-01	1.4470E+01	2.0000E+01	
		IN-FLT REACT. X-SECS	20	70/12/02	-1.0100E-01	1.4470E+01	2.0000E+01	
		MAXN. AV. AV. E OF RESIDUAL	4	85/01/30	-1.0100E-01	1.4470E+01	2.0000E+01	
		MAXN. AV. TOT. AV. ENERGY	2	82/05/15	-1.0100E-01	1.4470E+01	2.0000E+01	
	N	ENERGY-ANGLE DIST.	4	81/04/22	-1.0100E-01	1.4470E+01	2.0000E+01	
	N	ENERGY DEP. TO Y0	4	85/04/16	-1.0100E-01	1.4470E+01	2.0000E+01	
	N	ENERGY FROM THER. REACT.	4	82/05/29	-1.0100E-01	1.4470E+01	2.0000E+01	
	N	MAXN. AV. TOT. AV. E OF PART	4	82/05/29	-1.0100E-01	1.4470E+01	2.0000E+01	
	G	ENERGY DEP. TO Y0	4	83/04/16	-1.0100E-01	1.4470E+01	2.0000E+01	
D,N'A		CROSS-SECTION	6	85/09/26	1.5122E+01	1.0000E-03	1.0000E+01	
		MAXN. AV. REACT. RATES	182	80/02/23	1.5122E+01	1.0000E-04	1.0000E+01	
		IN-FLT REACT. X-SECS	20	85/09/26	1.5122E+01	1.0000E-03	1.0000E+01	
	N	ENERGY-ANGLE DIST.	6	85/09/26	1.5122E+01	1.0000E-03	1.0000E+01	
	N	ENERGY DEP. TO Y0	2	85/12/16	1.5122E+01	1.0000E-03	1.0000E+01	
	A	ENERGY-ANGLE DIST.	6	85/09/26	1.5122E+01	1.0000E-03	1.0000E+01	
	A	ENERGY DEP. TO Y0	2	85/12/16	1.5122E+01	1.0000E-03	1.0000E+01	
	A(R)	ENERGY-ANGLE DIST.	2	85/09/26	1.5122E+01	1.0000E-03	1.0000E+01	
	A(R)	ENERGY DEP. TO Y0	2	85/12/16	1.5122E+01	1.0000E-03	1.0000E+01	
T,2NA		CROSS-SECTION	14	85/01/22	1.0000E+00	1.0000E-03	1.0000E+01	
		MAXN. AV. REACT. RATES	182	80/02/23	1.0000E+00	1.0000E-04	1.0000E+01	
		IN-FLT REACT. X-SECS	20	85/01/22	1.0000E+00	1.0000E-03	1.0000E+01	
	N	ENERGY-ANGLE DIST.	6	85/01/22	1.0000E+00	1.0000E-03	1.0000E+01	
	N	ENERGY DEP. TO Y0	3	85/04/16	1.0000E+00	1.0000E-03	1.0000E+01	
	A	ENERGY-ANGLE DIST.	6	85/01/22	1.0000E+00	1.0000E-03	1.0000E+01	
	A	ENERGY DEP. TO Y0	3	85/04/16	1.0000E+00	1.0000E-03	1.0000E+01	
	A(R)	ENERGY-ANGLE DIST.	6	85/01/22	1.0000E+00	1.0000E-03	1.0000E+01	

LEVEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LEVEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LEVEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LEVEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LEVEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

02/10/86

 3-LI-7
 ATOMIC MASS = 7.01600490
 GROUP STABLE

REACTION	YO	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
T,2NA								
HE3,NPA	A(R)	ENERGY DEP. TO YO	2	85/04/16	8.8670E+00	1.0000E-03	2.0000E+01	
		CROSS-SECTION	6	85/08/26	9.6631E+00	1.0000E-03	2.0000E+01	
		MAXN. AV. REACT. RATES	182	80/02/23	1.1203E+01	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	85/08/26	1.1203E+01	1.0000E-03	2.0000E+01	
	N	ENERGY-ANGLE DIST.	6	85/08/26	9.6631E+00	1.0000E-03	2.0000E+01	
	N	ENERGY DEP. TO YO	2	85/09/11	1.1203E+01	1.0000E-03	2.0000E+01	
	P	ENERGY-ANGLE DIST.	6	85/08/26	9.6631E+00	1.0000E-03	2.0000E+01	
	P	ENERGY DEP. TO YO	2	85/09/11	1.1203E+01	1.0000E-03	2.0000E+01	
	A	ENERGY-ANGLE DIST.	6	85/08/26	9.6631E+00	1.0000E-03	2.0000E+01	
	A	ENERGY DEP. TO YO	2	85/09/11	1.1203E+01	1.0000E-03	2.0000E+01	
HE3,P	A(R)	ENERGY-ANGLE DIST.	6	85/08/26	9.6631E+00	1.0000E-03	2.0000E+01	
	A(R)	ENERGY DEP. TO YO	2	85/09/11	1.1203E+01	1.0000E-03	2.0000E+01	
		CROSS-SECTION	6	85/08/26	1.1203E+01	1.0000E-03	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	85/09/11	1.1203E+01	1.0000E-03	2.0000E+01	
		MAXN. AV. REACT. RATES	182	80/02/23	1.1203E+01	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	85/08/26	1.1203E+01	1.0000E-03	2.0000E+01	
	P	ANGULAR DIST.	2	85/08/26	1.1203E+01	1.0000E-03	2.0000E+01	
	P	ENERGY DEP. TO YO	2	85/09/11	1.1203E+01	1.0000E-03	2.0000E+01	
HE3,T		CROSS-SECTION	11	70/12/02	8.8000E-01	1.0000E-02	2.0000E+01	
		ENERGY DEP. RESIDUAL	11	83/04/05	8.8000E-01	1.0000E-02	2.0000E+01	
		MAXN. AV. REACT. RATES	86	78/03/02	8.8000E-01	1.0000E-02	2.0000E+01	
		IN-FLT REACT. X-SECS	20	70/12/02	8.8000E-01	1.0000E-03	2.0000E+01	
		MAXN. AV. AV. E OF RESIDUAL	7	70/12/02	8.8000E-01	1.0000E-03	2.0000E+01	
		MAXN. AV. TOT. AV. ENERGY	5	82/05/15	8.8000E-01	1.0000E-03	2.0000E+01	
	T	ENERGY-ANGLE DIST.	11	81/06/02	8.8000E-01	1.0000E-03	2.0000E+01	
	T	ENERGY DEP. TO YO	11	83/04/05	8.8000E-01	1.0000E-03	2.0000E+01	
	T	ENERGY FROM THER. REACT.	7	83/05/29	8.8000E-01	1.0000E-03	2.0000E+01	
	T	MAXN. AV. TOT. AV. E OF PART	7	83/05/29	8.8000E-01	1.0000E-03	2.0000E+01	
	G	ENERGY DEP. TO YO	11	83/04/05	8.8000E-01	1.0000E-03	2.0000E+01	
P,A		CROSS-SECTION	25	82/10/30	1.7344E+01	1.0000E-02	2.0000E+01	
		MAXN. AV. REACT. RATES	182	82/10/30	1.7344E+01	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	82/10/30	1.7344E+01	1.0000E-03	2.0000E+01	
		ENERGY-ANGLE DIST.	6	83/04/05	1.7344E+01	1.0000E-03	2.0000E+01	
	A	ENERGY DEP. TO YO	2	83/04/05	1.7344E+01	1.0000E-03	2.0000E+01	
	A(R)	ENERGY-ANGLE DIST.	6	83/11/02	1.7344E+01	1.0000E-03	2.0000E+01	
	A(R)	ENERGY DEP. TO YO	2	83/04/05	1.7344E+01	1.0000E-03	2.0000E+01	
HE3,A		CROSS-SECTION	9	85/11/13	1.3328E+01	1.0000E-02	2.0000E+01	
		ENERGY DEP. RESIDUAL	9	85/12/16	1.3328E+01	1.0000E-02	2.0000E+01	
		MAXN. AV. REACT. RATES	182	80/02/23	1.3328E+01	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	85/11/13	1.3328E+01	1.0000E-03	2.0000E+01	
	A	ANGULAR DIST.	5	85/11/13	1.3328E+01	1.0000E-02	2.0000E+01	
	A	ENERGY DEP. TO YO	9	85/12/16	1.3328E+01	1.0000E-02	2.0000E+01	
HE3,A		CROSS-SECTION	8	85/11/13	1.3328E+01	1.0000E-02	2.0000E+01	
		ENERGY DEP. RESIDUAL	9	85/12/16	1.3328E+01	1.0000E-02	2.0000E+01	
		MAXN. AV. REACT. RATES	182	80/02/23	1.3328E+01	1.0000E-04	2.0000E+01	

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ATOMIC MASS 4-DE-7
 1.70143640
 CROSS SECTION
 VALUE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	
P.COUL.SC	P	CROSS-SECTION	109	81/02/27	0.	1	00000E-04	0.00000E+01
		ENERGY DEP. RESIDUAL	22	83/04/05	0.	1	00000E-04	0.00000E+01
		MAXM. AV. REACT. RATES	18	80/02/27	0.	1	00000E-04	0.00000E+01
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0	00000E-04	0.00000E+01
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	0	00000E-04	0.00000E+01
		ANGULAR DIST.	2	81/02/27	0.	1	00000E-04	0.00000E+01
		ENERGY DEP. TO Y0	2	83/04/05	0.	1	00000E-04	0.00000E+01
D.COUL.SC	D	CROSS-SECTION	109	81/02/27	0.	1	00000E-04	0.00000E+01
		ENERGY DEP. RESIDUAL	22	83/04/05	0.	1	00000E-04	0.00000E+01
		MAXM. AV. REACT. RATES	18	80/02/27	0.	1	00000E-04	0.00000E+01
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0	00000E-04	0.00000E+01
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	0	00000E-04	0.00000E+01
		ANGULAR DIST.	2	81/02/27	0.	1	00000E-04	0.00000E+01
		ENERGY DEP. TO Y0	2	83/04/05	0.	1	00000E-04	0.00000E+01
T.COUL.SC	T	CROSS-SECTION	109	81/02/27	0.	1	00000E-04	0.00000E+01
		ENERGY DEP. RESIDUAL	22	83/04/05	0.	1	00000E-04	0.00000E+01
		MAXM. AV. REACT. RATES	18	80/02/27	0.	1	00000E-04	0.00000E+01
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0	00000E-04	0.00000E+01
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	0	00000E-04	0.00000E+01
		ANGULAR DIST.	2	81/02/27	0.	1	00000E-04	0.00000E+01
		ENERGY DEP. TO Y0	2	83/04/05	0.	1	00000E-04	0.00000E+01
HE3.COUL.SC	HE3	CROSS-SECTION	109	81/02/27	0.	1	00000E-04	0.00000E+01
		ENERGY DEP. RESIDUAL	22	83/04/05	0.	1	00000E-04	0.00000E+01
		MAXM. AV. REACT. RATES	18	80/02/27	0.	1	00000E-04	0.00000E+01
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0	00000E-04	0.00000E+01
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	0	00000E-04	0.00000E+01
		ANGULAR DIST.	2	81/02/27	0.	1	00000E-04	0.00000E+01
		ENERGY DEP. TO Y0	2	83/04/05	0.	1	00000E-04	0.00000E+01
A.COUL.SC	A	CROSS-SECTION	109	81/02/27	0.	1	00000E-04	0.00000E+01
		ENERGY DEP. RESIDUAL	22	83/04/05	0.	1	00000E-04	0.00000E+01
		MAXM. AV. REACT. RATES	18	80/02/27	0.	1	00000E-04	0.00000E+01
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0	00000E-04	0.00000E+01
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	0	00000E-04	0.00000E+01
		ANGULAR DIST.	2	81/02/27	0.	1	00000E-04	0.00000E+01
		ENERGY DEP. TO Y0	2	83/04/05	0.	1	00000E-04	0.00000E+01

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4-DE-9
 ATOMIC MASS E. L. BIRRE, 80
 CROSS SECTION
 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P, COUL. SC	P	CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E-01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E-01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	2.00000E-01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E-01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E-01	
		ANGULAR DIST.	2	81/02/27	0.	1.00000E-04	2.00000E-01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.00000E-04	2.00000E-01	
D, COUL. SC	D	CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E-01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E-01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	2.00000E-01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E-01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E-01	
		ANGULAR DIST.	2	81/02/27	0.	1.00000E-04	2.00000E-01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.00000E-04	2.00000E-01	
T, COUL. SC	T	CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E-01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E-01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	2.00000E-01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E-01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E-01	
		ANGULAR DIST.	2	81/02/27	0.	1.00000E-04	2.00000E-01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.00000E-04	2.00000E-01	
HE3, COUL. SC	HE3	CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E-01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E-01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	2.00000E-01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E-01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E-01	
		ANGULAR DIST.	2	81/02/27	0.	1.00000E-04	2.00000E-01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.00000E-04	2.00000E-01	
A, COUL. SC	A	CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E-01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E-01	
		MAXM. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	2.00000E-01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.00000E-04	2.00000E-01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	2.00000E-01	
		ANGULAR DIST.	2	81/02/27	0.	1.00000E-04	2.00000E-01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.00000E-04	2.00000E-01	
A, N	N	CROSS-SECTION	21	08/07	7.70	0.00000E+00	0.00000E+00	
		ENERGY DEP. RESIDUAL	10	08/07	7.70	0.00000E+00	0.00000E+00	
		MAXM. AV. REACT. RATES	258	08/07	7.70	0.00000E+00	0.00000E+00	
		IN-FLT REACT. X-SECS	20	08/07	7.70	0.00000E+00	0.00000E+00	
		MAXM. AV. AV. E OF RESIDUAL	7	08/07	7.70	0.00000E+00	0.00000E+00	
		MAXM. AV. TOT. AV. ENERGY	1	08/07	7.70	0.00000E+00	0.00000E+00	
		ANGULAR DIST.	1	08/07	7.70	0.00000E+00	0.00000E+00	
ENERGY DEP. TO Y0	1	08/07	7.70	0.00000E+00	0.00000E+00			
ENERGY FROM THER. REACT.	1	08/07	7.70	0.00000E+00	0.00000E+00			
MAXM. AV. TOT. AV. E OF PART	1	08/07	7.70	0.00000E+00	0.00000E+00			

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4-DE-9
 ATOMIC MASS 1.00866491588
 STABLE

REACTION	YO	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
A,N'		CROSS-SECTION	3	82/08/07	702	1.4	0.000000	0.000000
		ENERGY DEP. RESIDUAL	3	82/04/05	702	0.000000	0.000000	0.000000
		MAXM. AV. REACT. RATES	3	82/08/07	702	0.000000	0.000000	0.000000
		IN-FLT REACT. X-SECS	3	82/08/07	702	0.000000	0.000000	0.000000
		MAXM. AV. AV. E OF RESIDUAL	3	82/08/07	702	0.000000	0.000000	0.000000
		MAXM. AV. TOT. AV. ENERGY	3	82/08/07	702	0.000000	0.000000	0.000000
		ANGULAR DIST.	3	82/08/07	702	0.000000	0.000000	0.000000
	N	ENERGY DEP. TO YO	3	82/08/07	702	0.000000	0.000000	0.000000
	N	ENERGY FROM THER. REACT.	3	82/08/07	702	0.000000	0.000000	0.000000
	N	MAXM. AV. TOT. AV. E OF PART	3	82/08/07	702	0.000000	0.000000	0.000000
	G	ENERGY DEP. TO YO	3	82/04/05	702	0.000000	0.000000	0.000000
A,N' 3A		CROSS-SECTION	12	82/08/07	572	4.4	0.000000	0.000000
	N	ENERGY-ANGLE DIST.	12	82/11/15	572	0.000000	0.000000	0.000000
	N	ENERGY DEP. TO YO	12	82/04/05	572	0.000000	0.000000	0.000000
	A	ENERGY-ANGLE DIST.	12	82/11/15	572	0.000000	0.000000	0.000000
	A	ENERGY DEP. TO YO	12	82/04/05	572	0.000000	0.000000	0.000000
	A(R)	ENERGY-ANGLE DIST.	12	82/11/15	572	0.000000	0.000000	0.000000
	A(R)	ENERGY DEP. TO YO	12	82/04/05	572	0.000000	0.000000	0.000000
A,N' 3A		CROSS-SECTION	10	82/08/07	572	1.1	0.000000	0.000000
	N	ANGULAR DIST.	10	82/08/07	572	0.000000	0.000000	0.000000
	N	ENERGY DEP. TO YO	10	82/04/05	572	0.000000	0.000000	0.000000
	A	ENERGY-ANGLE DIST.	10	82/08/16	572	0.000000	0.000000	0.000000
	A	ENERGY DEP. TO YO	10	82/04/05	572	0.000000	0.000000	0.000000
	A(R)	ENERGY-ANGLE DIST.	10	82/08/16	572	0.000000	0.000000	0.000000
	A(R)	ENERGY DEP. TO YO	10	82/04/05	572	0.000000	0.000000	0.000000
A,N' 3A		CROSS-SECTION	7	82/08/07	572	1.1	0.000000	0.000000
	N	ANGULAR DIST.	7	82/08/07	572	0.000000	0.000000	0.000000
	N	ENERGY DEP. TO YO	7	82/04/05	572	0.000000	0.000000	0.000000
	A	ENERGY-ANGLE DIST.	7	82/11/15	572	0.000000	0.000000	0.000000
	A	ENERGY DEP. TO YO	7	82/04/05	572	0.000000	0.000000	0.000000
	A(R)	ENERGY-ANGLE DIST.	7	82/11/15	572	0.000000	0.000000	0.000000
	A(R)	ENERGY DEP. TO YO	7	82/04/05	572	0.000000	0.000000	0.000000
A,XG		CROSS-SECTION	3	82/08/07	0.0	1.4	0.000000	0.000000
		MAXM. AV. REACT. RATES	3	82/08/07	0.0	0.000000	0.000000	0.000000
		MAXM. AV. TOT. AV. ENERGY	3	82/08/07	0.0	0.000000	0.000000	0.000000
		ANGULAR DIST.	3	82/08/07	0.0	0.000000	0.000000	0.000000
		ENERGY FROM THER. REACT.	3	82/01/30	0.0	0.000000	0.000000	0.000000
		MAXM. AV. TOT. AV. E OF PART	3	82/01/30	0.0	0.000000	0.000000	0.000000
	G							
	G							
	G							

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 ATOMIC MASS = 10.000000
 CHARGE = 0
 STABLE

REACTION	YO	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER	
P,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01		
		ENERGY DEP. RESIDUAL	22	83/04/05	0.	1.00000E-04	2.00000E+01		
		MAXH. AV. REACT. RATES	1822	80/02/23	0.	0.00000E-04	1.00000E+00		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.00000E-04	1.00000E+00		
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	0.00000E-04	1.00000E+00		
D,COUL.SC	P	ANGULAR DIST.	2	81/02/27	0.	1.00000E-04	2.00000E+01		
		ENERGY DEP. TO YO	2	83/04/05	0.	1.00000E-04	2.00000E+01		
		CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01		
		ENERGY DEP. RESIDUAL	22	83/04/05	0.	1.00000E-04	2.00000E+01		
		MAXH. AV. REACT. RATES	1822	80/02/23	0.	0.00000E-04	1.00000E+00		
T,COUL.SC	D	IN-FLT REACT. X-SECS	20	81/02/27	0.	0.00000E-04	1.00000E+00		
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	0.00000E-04	1.00000E+00		
		ANGULAR DIST.	2	81/02/27	0.	1.00000E-04	2.00000E+01		
		ENERGY DEP. TO YO	2	83/04/05	0.	1.00000E-04	2.00000E+01		
		CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01		
HE3,COUL.SC	T	ENERGY DEP. RESIDUAL	22	83/04/05	0.	1.00000E-04	2.00000E+01		
		MAXH. AV. REACT. RATES	1822	80/02/23	0.	0.00000E-04	1.00000E+00		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.00000E-04	1.00000E+00		
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	0.00000E-04	1.00000E+00		
		ANGULAR DIST.	2	81/02/27	0.	1.00000E-04	2.00000E+01		
A,COUL.SC	HE3	ENERGY DEP. TO YO	2	83/04/05	0.	1.00000E-04	2.00000E+01		
		CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01		
		ENERGY DEP. RESIDUAL	22	83/04/05	0.	1.00000E-04	2.00000E+01		
		MAXH. AV. REACT. RATES	1822	80/02/23	0.	0.00000E-04	1.00000E+00		
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.00000E-04	1.00000E+00		
D,N'	A	MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	0.00000E-04	1.00000E+00		
		ANGULAR DIST.	2	81/02/27	0.	1.00000E-04	2.00000E+01		
		ENERGY DEP. TO YO	2	83/04/05	0.	1.00000E-04	2.00000E+01		
		CROSS-SECTION	20	78/08/17	6.47000E+00	1.00000E-01	2.00000E+01		
		ENERGY DEP. RESIDUAL	7	83/04/05	6.47000E+00	1.00000E-01	2.00000E+01		
N		MAXH. AV. REACT. RATES	132	78/03/02	6.47000E+00	1.82000E-03	1.00000E+00		
		IN-FLT REACT. X-SECS	20	78/08/17	6.47000E+00	0.	1.00000E+00		
		MAXH. AV. AV. E OF RESIDUAL	10	82/05/29	6.47000E+00	1.80000E-03	1.00000E+00		
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	6.47000E+00	1.80000E-03	1.00000E+00		
		ENERGY-ANGLE DIST.	12	81/06/02	6.47000E+00	1.00000E-01	1.00000E+01		
		ENERGY DEP. TO YO	7	83/04/05	6.47000E+00	1.00000E-01	1.00000E+01		
		ENERGY DEP. FROM THER. REACT.	10	82/05/29	6.47000E+00	1.00000E-01	1.00000E+01		
		MAXH. AV. TOT. AV. E OF PART	10	82/05/29	6.47000E+00	1.80000E-03	1.00000E+00		

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 ATOMIC MASS - 10
 STABLE

REACTION	YO	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
D,N'								
D,2A	G	ENERGY DEP. TO YO	11	83/04/05	6.4700E+00	1.0000E-01	2.0000E+01	
		CROSS-SECTION	14	78/03/18	1.7914E+01	1.0000E-01	2.0000E+01	
		MAXM. AV. REACT. RATES	132	78/03/02	1.7914E+01	1.0000E-01	2.0000E+01	
		IN-FLT REACT. X-SECS	20	78/08/18	1.7914E+01	1.0000E-01	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	11	82/05/15	1.7914E+01	1.0000E-01	2.0000E+01	
A		ENERGY-ANGLE DIST.	22	81/04/22	1.7914E+01	1.0000E-01	2.0000E+01	
A		ENERGY DEP. TO YO	22	83/04/05	1.7914E+01	1.0000E-01	2.0000E+01	
A		ENERGY FROM THER. REACT.	10	82/05/29	1.7914E+01	1.0000E-01	2.0000E+01	
A		MAXM. AV. TOT. AV. E OF PART	10	82/05/29	1.7914E+01	1.0000E-01	2.0000E+01	
A(R)		ENERGY-ANGLE DIST.	22	81/04/22	1.7914E+01	1.0000E-01	2.0000E+01	
A(R)		ENERGY DEP. TO YO	22	83/04/05	1.7914E+01	1.0000E-01	2.0000E+01	
A(R)		ENERGY FROM THER. REACT.	10	82/05/29	1.7914E+01	1.0000E-01	2.0000E+01	
A(R)		MAXM. AV. TOT. AV. E OF PART	10	82/05/29	1.7914E+01	1.0000E-01	2.0000E+01	
P,HE3A		CROSS-SECTION	19	74/09/08	-4.4000E-01	4.0000E-01	2.0000E+01	
		MAXM. AV. REACT. RATES	90	78/03/02	-4.4000E-01	4.0000E-01	2.0000E+01	
		IN-FLT REACT. X-SECS	20	74/09/08	-4.4000E-01	4.0000E-01	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	12	82/05/15	-4.4000E-01	4.0000E-01	2.0000E+01	
HE3		ENERGY-ANGLE DIST.	7	81/07/06	-4.4000E-01	4.0000E-01	2.0000E+01	
HE3		ENERGY DEP. TO YO	7	83/04/05	-4.4000E-01	4.0000E-01	2.0000E+01	
HE3		ENERGY FROM THER. REACT.	7	85/01/30	-4.4000E-01	4.0000E-01	2.0000E+01	
HE3		MAXM. AV. TOT. AV. E OF PART	7	85/01/30	-4.4000E-01	4.0000E-01	2.0000E+01	
A		ENERGY-ANGLE DIST.	7	81/07/06	-4.4000E-01	4.0000E-01	2.0000E+01	
A		ENERGY DEP. TO YO	7	83/04/05	-4.4000E-01	4.0000E-01	2.0000E+01	
A		ENERGY FROM THER. REACT.	7	82/05/29	-4.4000E-01	4.0000E-01	2.0000E+01	
A		MAXM. AV. TOT. AV. E OF PART	7	82/05/29	-4.4000E-01	4.0000E-01	2.0000E+01	
A(R)		ENERGY-ANGLE DIST.	7	81/07/06	-4.4000E-01	4.0000E-01	2.0000E+01	
A(R)		ENERGY DEP. TO YO	7	83/04/05	-4.4000E-01	4.0000E-01	2.0000E+01	
A(R)		ENERGY FROM THER. REACT.	7	82/05/29	-4.4000E-01	4.0000E-01	2.0000E+01	
A(R)		MAXM. AV. TOT. AV. E OF PART	7	82/05/29	-4.4000E-01	4.0000E-01	2.0000E+01	
D,P		CROSS-SECTION	13	74/09/08	9.2300E+00	1.0000E-01	2.0000E+01	
		ENERGY DEP. RESIDUAL	5	83/04/05	9.2300E+00	1.0000E-01	2.0000E+01	
		MAXM. AV. REACT. RATES	129	78/03/02	9.2300E+00	1.0000E-01	2.0000E+01	
		IN-FLT REACT. X-SECS	20	74/09/08	9.2300E+00	1.0000E-01	2.0000E+01	
		MAXM. AV. AV. E OF RESIDUAL	10	82/05/29	9.2300E+00	1.0000E-01	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	13	82/05/15	9.2300E+00	1.0000E-01	2.0000E+01	
P		ENERGY-ANGLE DIST.	12	81/04/02	9.2300E+00	1.0000E-01	2.0000E+01	
P		ENERGY DEP. TO YO	6	83/04/05	9.2300E+00	1.0000E-01	2.0000E+01	
P		ENERGY FROM THER. REACT.	10	82/05/29	9.2300E+00	1.0000E-01	2.0000E+01	
P		MAXM. AV. TOT. AV. E OF PART	10	82/05/29	9.2300E+00	1.0000E-01	2.0000E+01	
G		ENERGY DEP. TO YO	10	83/04/05	9.2300E+00	1.0000E-01	2.0000E+01	
P,A		CROSS-SECTION	34	74/09/08	1.1500E+00	1.0000E-01	2.0000E+01	
		ENERGY DEP. RESIDUAL	10	83/04/05	1.1500E+00	1.0000E-01	2.0000E+01	
		MAXM. AV. REACT. RATES	131	78/03/02	1.1500E+00	1.0000E-01	2.0000E+01	
		IN-FLT REACT. X-SECS	20	74/09/08	1.1500E+00	1.0000E-01	2.0000E+01	
		MAXM. AV. AV. E OF RESIDUAL	10	82/05/29	1.1500E+00	1.0000E-01	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	11	82/05/15	1.1500E+00	1.0000E-01	2.0000E+01	
A		ENERGY-ANGLE DIST.	12	81/04/02	1.1500E+00	1.0000E-01	2.0000E+01	

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ATOMIC MASS 2.11
 CROSS SECTION
 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P,N'								
D,N'	G	ENERGY DEP. TO Y0	10	83/04/05	-2.7700E+00	3.0200E+00	2.0000E+01	
		CROSS-SECTION	19	78/03/17	1.1400E+00	1.0000E-01	2.0000E+01	
		ENERGY DEP. RESIDUAL	5	83/04/05	1.1400E+00	1.0000E-01	2.0000E+01	
		MAXM. AV. REACT. RATES	132	78/03/02	1.1400E+00	1.0000E-03	2.0000E+01	
		IN-FLT REACT. X-SECS	20	78/03/17	1.1400E+00	1.0000E+00	2.0000E+01	
		MAXM. AV. AV. E OF RESIDUAL	10	82/05/29	1.1400E+00	1.0000E-03	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	1.1400E+00	1.0000E-03	2.0000E+01	
	N	ENERGY-ANGLE DIST.	12	81/06/02	1.1400E+00	1.0000E-01	2.0000E+01	
	N	ENERGY DEP. TO Y0	5	83/04/05	1.1400E+00	1.0000E-01	2.0000E+01	
	N	ENERGY FROM THER. REACT.	10	82/05/29	1.1400E+00	1.0000E-03	2.0000E+01	
	N	MAXM. AV. TOT. AV. E OF PART	10	82/05/29	1.1400E+00	1.0000E-03	2.0000E+01	
	G	ENERGY DEP. TO Y0	10	83/04/05	1.1400E+00	1.0000E-01	2.0000E+01	
P,2A								
		CROSS-SECTION	62	78/03/17	8.4830E+00	4.8000E-02	2.0000E+01	
		MAXM. AV. REACT. RATES	134	78/03/02	8.4830E+00	4.8000E-03	2.0000E+01	
		IN-FLT REACT. X-SECS	20	78/03/17	8.4830E+00	4.8000E+00	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	15	82/05/15	8.4830E+00	4.8000E-03	2.0000E+01	
	A	ENERGY-ANGLE DIST.	22	81/04/22	8.4830E+00	4.8000E-03	2.0000E+01	
	A	ENERGY DEP. TO Y0	22	83/04/05	8.4830E+00	4.8000E-03	2.0000E+01	
	A	ENERGY FROM THER. REACT.	10	82/05/29	8.4830E+00	4.8000E-03	2.0000E+01	
	A	MAXM. AV. TOT. AV. E OF PART	10	82/05/29	8.4830E+00	4.8000E-03	2.0000E+01	
	A(R)	ENERGY-ANGLE DIST.	22	81/04/22	8.4830E+00	4.8000E-03	2.0000E+01	
	A(R)	ENERGY DEP. TO Y0	22	83/04/05	8.4830E+00	4.8000E-03	2.0000E+01	
	A(R)	ENERGY FROM THER. REACT.	10	82/05/29	8.4830E+00	4.8000E-03	2.0000E+01	
	A(R)	MAXM. AV. TOT. AV. E OF PART	10	82/05/29	8.4830E+00	4.8000E-03	2.0000E+01	
D,P								
		CROSS-SECTION	11	74/09/09	1.1400E+00	1.0000E-01	2.0000E+01	
		ENERGY DEP. RESIDUAL	8	83/04/05	1.1400E+00	1.0000E-01	2.0000E+01	
		MAXM. AV. REACT. RATES	132	78/03/02	1.1400E+00	1.0000E-03	2.0000E+01	
		IN-FLT REACT. X-SECS	20	74/09/09	1.1400E+00	1.0000E+00	2.0000E+01	
		MAXM. AV. AV. E OF RESIDUAL	10	82/05/29	1.1400E+00	1.0000E-03	2.0000E+01	
		MAXM. AV. TOT. AV. ENERGY	10	82/05/15	1.1400E+00	1.0000E-03	2.0000E+01	
	P	ENERGY-ANGLE DIST.	12	81/06/02	1.1400E+00	1.0000E-01	2.0000E+01	
	P	ENERGY DEP. TO Y0	8	83/04/05	1.1400E+00	1.0000E-01	2.0000E+01	
	P	ENERGY FROM THER. REACT.	10	82/05/29	1.1400E+00	1.0000E-03	2.0000E+01	
	P	MAXM. AV. TOT. AV. E OF PART	10	82/05/29	1.1400E+00	1.0000E-03	2.0000E+01	
	G	ENERGY DEP. TO Y0	10	83/04/05	1.1400E+00	1.0000E-01	2.0000E+01	

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 ATOMIC MASS 2.110000001
 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	1.00000E+00	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	1.00000E+00	
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	1.00000E+00	
		ANGULAR DIST	2	81/02/27	0.	1.00000E-04	2.00000E+01	
D,COUL.SC	P	ENERGY DEP. TO Y0	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	1.00000E+00	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	1.00000E+00	
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	1.00000E+00	
T,COUL.SC	D	ANGULAR DIST	2	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	1.00000E+00	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	1.00000E+00	
HE3,COUL.SC	T	MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	1.00000E+00	
		ANGULAR DIST	2	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	1.00000E+00	
A,COUL.SC	HE3	IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	1.00000E+00	
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	1.00000E+00	
		ANGULAR DIST	2	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.00000E-04	2.00000E+01	
		CROSS-SECTION	109	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.00000E-04	2.00000E+01	
A,COUL.SC	A	MAXH. AV. REACT. RATES	182	80/02/23	0.	1.00000E-04	1.00000E+00	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	0.	1.00000E+00	
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.00000E-04	1.00000E+00	
		ANGULAR DIST	2	81/02/27	0.	1.00000E-04	2.00000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.00000E-04	2.00000E+01	

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 ATOMIC MASS 2.0140388
 STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
	P	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	P	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
D,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
	D	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	D	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
T,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
	T	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	T	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
HE3,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
	HE3	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	HE3	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
A,COUL.SC		CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXH. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXH. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
	A	ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
	A	ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	

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 ATOMIC MASS 8-0-16
 CROSS STABLE

REACTION	Y0	PROPERTY	ENTRIES	DATE	Q-VALUE	E-MIN	E-MAX	QUALIFIER
P,COUL.SC	P	CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXW. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXW. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
D,COUL.SC	D	CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXW. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXW. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
T,COUL.SC	T	CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXW. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXW. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
HE3,COUL.SC	HE3	CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXW. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXW. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	
A,COUL.SC	A	CROSS-SECTION	109	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. RESIDUAL	2	83/04/05	0.	1.0000E-04	2.0000E+01	
		MAXW. AV. REACT. RATES	182	80/02/23	0.	1.0000E-04	2.0000E+01	
		IN-FLT REACT. X-SECS	20	81/02/27	0.	1.0000E-04	2.0000E+01	
		MAXW. AV. TOT. AV. ENERGY	10	82/05/15	0.	1.0000E-04	2.0000E+01	
		ANGULAR DIST.	2	81/02/27	0.	1.0000E-04	2.0000E+01	
		ENERGY DEP. TO Y0	2	83/04/05	0.	1.0000E-04	2.0000E+01	