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**Solvent Handbook Database System
User's Manual**

Revision 1.0

MASTER

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Solvent Handbook Database System

User's Manual

Revision 1.0

Published March 1993

**Idaho National Engineering Laboratory
EG&G Idaho, Inc.
Idaho Falls, Idaho 83415**

**Prepared for the
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MASTER

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Solvent Handbook Database System

User's Manual

1. INTRODUCTION

Industrial solvents and cleaners are used in maintenance facilities to remove wax, grease, oil, carbon, machining fluids, solder fluxes, mold release, and various other contaminants from parts, and to prepare the surface of various metals. However, because of growing environmental and worker-safety concerns, government regulations have already excluded the use of some chemicals and have restricted the use of halogenated hydrocarbons because they affect the ozone layer and may cause cancer.

The Solvent Handbook Database System lets you view information on solvents and cleaners, including test results on cleaning performance, air emissions, recycling and recovery, corrosion, and non-metals compatibility. Company and product safety information is also available.

The software and this user's manual for the Solvent Handbook Database System will be revised and updated periodically as needed.

2. ACCESS REQUIREMENTS

2.1 ID Number and Passwords

In order to log on to the system, you must have a Network Control Center (NCC) LOGIN ID number and two passwords: one for the NCC (the Idaho National Engineering Laboratory network) and one for the Solvent Handbook Database System (SHDS). SHDS technical support should have sent you this information if you completed an application to be a SHDS user. If you have not received your ID number and passwords, contact the system administrator:

Angela Reyes
EG&G Idaho, Inc.
P.O. Box 1625
Idaho Falls, ID 83415-2208
(208) 526-7834

2.2 Setting up the Connection

Before you log on to the Solvent Handbook Database System, do the following:

- Configure your communications software (such as PROCOMM PLUS or CROSSTALK) to emulate a VT100-type terminal. When you log on to the system, you will indicate the type of terminal you are using. If you do not use a VT100-type terminal, SHDS may not communicate properly with your PC or terminal. Also, the keys you should press on your keyboard to perform commands may be altered.
- Set the dip switches on your modem to match your own PC or terminal configuration and the type of modem you are using. If you are using a HAYES or HAYES-compatible modem with a terminal, set the dip switches as follows: 1-down, 2-up, 3-down, 4-up, 5-up, 6-up, 7-up, 8-down.
- Set your modem to the following communication settings:
  - Parity = none
  - Data bits = 8
  - Stop bits = 1
  - Duplex = full
  - Baud rate = 9600 (or any lower baud rate).

If you have any questions regarding your connection to the system, contact the system administrator (see Section 2.1).

3. LOGGING ON TO THE SOLVENT HANDBOOK DATABASE SYSTEM

If you have your ID number and passwords, and have your hardware and software set up (see Section 2), you are ready to log on to SHDS:

- Call the Network Control Center (NCC) at the Idaho National Engineering Laboratory by dialing either (208) 526-1940 or (208) 526-0835. If the connection is successful, you will be prompted for the destination.
- Type **sen** and press **<Enter>**. A "NCCLOGIN:" prompt will appear.
- Type your NCCLOGIN ID number and press **<Enter>**. You will then be prompted for your NCC password:
- Type your NCC password and press **<Enter>**. The system will display a calling message.
- Just press **<Enter>**. A host menu and a "TS-ISC-05" prompt will appear.
- Type **c sho** and press **<Enter>** to request a connection to SHDS. A "login:" prompt will be displayed.
- Type your NCCLOGIN ID number again and press **<Enter>**. The system will then display a password prompt.
- Type your SHDS account password and press **<Enter>**. A VT100 verification prompt will appear.
- If you are using a VT100-type terminal, just press **<Enter>**. If you are using a different type of terminal, enter the type of terminal it is and press **<Enter>**.

An SHDS banner page and the disclaimer message will be displayed for a few seconds. Then, the system will display the User Log Screen, as shown in Figure 1.

- Type your name and press **<Enter>**.
- Type your company name and choose the **Enter** option. If you choose the **Exit** option, you will be disconnected from the network.

If you are using a VT-type terminal, choose the **Enter** option by pressing the key shown in parentheses at the bottom of the screen next to "Enter." If you are using a PC, choose the **Enter** option by typing the number shown in parentheses. Use the keypad on the right side of your keyboard and make sure "Num Lock" is turned on.

After you choose the **Enter** option, SHDS will display the Main Menu, as shown in Figure 2. You are now logged on to SHDS. See Section 4, which explains each of the options available in the Solvent Handbook Database System.

Enter( ) Exit( )

Figure 1. User Log Screen.

Select( ) Exit( )

Figure 2. Main Menu.

4. SEARCHING FOR SHDS INFORMATION

This section lets you know how to move from screen to screen, enter commands, and enter search criteria to view information in the Solvent Handbook Database System.

- In the Main Menu, use the up/down arrow keys or the **<Enter>** key to highlight the type of information you want to view.

If you choose the **Exit** option, SHDS will log you out of the system and automatically disconnect you from the network.

- Choose the **Select** option. SHDS will display the query screen for the subject you selected. See Figure 3 in Section 4.1 for an example of a query screen.
- On the query screen, type an entry in each of the fields that you want to use for searching information in the database. After each entry, press **<Enter>** or **<Tab>** to move the cursor to the next field.

You may enter a single character in a field to search for all records in which that field begins with that letter. For example, if you entered just the letter **S** in a **Company** field, SHDS would search for all records that included company names that begin with the letter S.

If you leave all fields blank, SHDS will retrieve all records.

If you choose the **Exit** option, SHDS will take you back to the Main Menu.

- Choose the **Query** option. SHDS will search for and display a list of all records that match the values you entered in each field. For an example of a list screen, see Figure 4 in Section 4.1.
- Use the arrow keys along with the **Top** and **Bottom** options to highlight the record for which you want to view information.

If you choose the **Exit** option, SHDS will take you back to the query screen.

- Choose the **View** option to see an expanded view of the selected record. See Figure 5 in Section 4.1 for an example of a record screen.

If you change any value on a record screen, the system will not save the change. The information is for viewing only.

- Choose the **Exit** option on each screen until SHDS displays the screen you want.

See Sections 4.1 through 4.8 for more details on Main Menu options (Figure 2).

4.1 Air Emissions

If you choose Air Emissions from the Main Menu, SHDS will display the Air Emissions Query Screen, as shown in Figure 3.

```
SOLVENT HANDBOOK DATABASE SYSTEM
Air Emissions Query

Product:
Company:
Temperature Low (F):
Retention Time:

Temperature High (F):

Please enter any values or combination of values
(blank values are valid) and press <query> for
air emissions information.

Query( ) Exit( )
```

Figure 3. Air Emissions Query Screen.

- Enter values in each field you want to use for your query.

In the two Temperature fields, if you enter only a Low value, SHDS will search for temperatures greater than or equal to the low value you entered. If you enter only a High value, SHDS will search for temperatures less than or equal to the high value you entered. If you enter both Low and High values, SHDS will search for temperatures both greater than or equal to the low value and less than or equal to the high value.

If you enter a Retention Time value, be sure to use one of these three formats: **mm:ss**, **mm**, or **:ss**. For example, you may enter a value like **32:15**, **18**, or **:30**.

If you choose the **Exit** option, SHDS will take you back to the Main Menu.

- Choose the **Query** option. SHDS will display the Air Emissions List Screen, as shown in Figure 4, which shows a list of all records that match the values you entered.
- Highlight the record you want to view.

If you choose the **Exit** option, SHDS will take you back to the Air Emissions Query Screen.

Air Emissions List		
product	temp(f)	retention time

View( ) Top( ) Bottom( ) Exit( )

Figure 4. Air Emissions List Screen.

- Choose the **View** option. The system will display the Air Emissions Record Screen, which shows specific information for the record you selected (see Figure 5).

Air Emissions Record	
Product:	
Company:	
Methodology Revision Number:	S/N:
Temperature(F):	Retention Time:
TIC:	
Headspace Conc1.:	Headspace Conc2.:
Air Toxic?:	
Footnotes:	

Exit( )

Figure 5. Air Emissions Record Screen.

- Choose the **Exit** option to return to the Air Emissions List Screen so you can view information on another record.

4.2 Cleaning Efficiency

If you choose Cleaning Efficiency from the Main Menu, SHDS will display the Cleaning Efficiency Query Screen, as shown in Figure 6.

```
SOLVENT HANDBOOK DATABASE SYSTEM
Cleaning Efficiency Query

Product:
Test Group:
Soil:
Metal:
Ambient:

Please enter any values or combination of values
(blank values are valid) and press <query> for
cleaning efficiency information.
```

Query( ) Exit( )

Figure 6. Cleaning Efficiency Query Screen.

- Enter any values you want to use to query records.

If you choose the **Exit** option, the Main Menu will be displayed.

- Choose the **Query** option. SHDS will display Figure 7, the Cleaning Efficiency List Screen, which shows a list of all records that match the values you entered.
- Highlight the record you want to view.

If you choose the **Exit** option, SHDS will take you back to the Cleaning Efficiency Query Screen.

- Choose the **View** option. The Cleaning Efficiency Record Screen will be displayed, as shown in Figure 8. It shows the information for the record you selected.
- After you have finished viewing information in the Cleaning Efficiency Record Screen, choose the **Exit** option to return to the Cleaning Efficiency List Screen so you can view information on another record.

Cleaning Efficiency List				
product	testgroup	soil	metal	ambient

View( ) Top( ) Bottom( ) Exit( )

Figure 7. Cleaning Efficiency List Screen.

Cleaning Efficiency Record						
Product:						
Methodology Revision Number:						
Test Group:			Date Run:			
Dilution:		Temperature:		Ambient:		
Metal:		Soil:				
Technique:						
rinse	time	soil removed	initial weight	cont. weight	final weight	% cleaned

Top( ) Bottom( ) Exit( )

Figure 8. Cleaning Efficiency Record Screen.

4.3 Company Information

If you choose Company Information from the Main Menu, SHDS will display Figure 9, the Company Information Query Screen.

Query( ) Exit( )

Figure 9. Company Information Query Screen.

- Enter a value you want to use to query records.

If you choose the **Exit** option, you will be taken back to the Main Menu.

- Choose the **Query** option. SHDS will display Figure 10, the Company Information List Screen, which shows a list of all records that match the values you entered.
- Highlight the record you want to view.

If you choose the **Exit** option, SHDS will take you back to the Company Information Query Screen.

- Choose the **View** option. The Company Information Record Screen will be displayed, as shown in Figure 11. It shows the information for the record you selected.
- After you have finished viewing information in the Company Information Record Screen, choose the **Exit** option to return to the Company Information List Screen so you can view information on another record.

Company List			
company name	city	state	phone number

View( ) Top( ) Bottom( ) Exit( )

Figure 10. Company Information List Screen.

Company Record	
Company:	
Address:	
City:	
State:	
Zip:	
Phone:	
Emer Phone:	
Contact:	

Top( ) Bottom( ) Exit( )

Figure 11. Company Information Record Screen.

4.4 Immersion Corrosion

If you choose Immersion Corrosion from the Main Menu, SHDS will display the Immersion Corrosion Query Screen, as shown in Figure 12.

```
SOLVENT HANDBOOK DATABASE SYSTEM
Immersion Corrosion Query

Product:
Test Group:
Metal:
Ambient:
Temp Low(F):
Temp High(F):
Pass Fail(P/F):

Please enter any values or combination of values
(blank values are valid) and press <query> for
immersion corrosion information.

Query( ) Exit( )
```

Figure 12. Immersion Corrosion Query Screen.

- Enter any values you want to use to query records.

In the two Temperature fields, if you enter only a Low value, SHDS will search for temperatures greater than or equal to the low value you entered. If you enter only a High value, SHDS will search for temperatures less than or equal to the high value you entered. If you enter both Low and High values, SHDS will search for temperatures both greater than or equal to the low value and less than or equal to the high value.

If you choose the **Exit** option, the Main Menu will be displayed.

- Choose the **Query** option. SHDS will display Figure 13, the Immersion Corrosion List Screen, which shows a list of all records that match the values you entered.
- Highlight the record you want to view.

If you choose the **Exit** option, SHDS will take you back to the Immersion Corrosion Query Screen.

- Choose the **View** option. The Immersion Corrosion Record Screen will be displayed, as shown in Figure 14. It shows the information for the record you selected.

Immersion Corrosion List				
product	group	ambient	metal	pass/fail

View( ) Top( ) Bottom( ) Exit( )

Figure 13. Immersion Corrosion List Screen.

Immersion Corrosion Record		
Product:	Test Group:	Pass/Fail:
Methodology Number:	Temp(F):	Ambient:
Dilution:	Metal:	Date Run:
Time Hours:		Avg. Corr. Rate:
Coupon 1:	Corrosion Rate 1:	
Description:		
Coupon 2:	Corrosion Rate 2:	
Description:		
Coupon 3:	Corrosion Rate 3:	
Description:		

Top( ) Bottom( ) Exit( )

Figure 14. Immersion Corrosion Record Screen.

- After you have finished viewing information in the Immersion Corrosion Record Screen, choose the **Exit** option to return to the Immersion Corrosion List Screen so you can view information on another record.

4.5 Methodologies

If you choose Methodologies from the Main Menu, SHDS will display Figure 15, which is the Methodology Query Screen.

SOLVENT HANDBOOK DATABASE SYSTEM
Methodology Query

Clean	1.00
Corrosion	1.00

Use the up/down arrow keys or the <top> / <bottom> keys to select a methodology. Press <query> to view the selected methodology.

Query( ) Top( ) Bottom( ) Exit( )

Figure 15. Methodology Query Screen.

- Highlight the methodology you want to view. Use arrow keys along with the **Top** and **Bottom** options to position the cursor.

If you choose the **Exit** option, SHDS will take you back to the Main Menu.

- Choose the **Query** option. The information on the methodology you selected will appear.
- Use the following keys to view the text:
  - Press **F** to move forward
  - Press **B** to move backward
  - Press **<Enter>** to move forward one line
  - Press the space bar to move forward one page
  - Press **?** or type **help** and then press **<Enter>** for help
  - Press **Q** to quit viewing the text.
- After you have finished viewing methodology information, choose the **Exit** option to return to the Main Menu.

4.6 Non-Metals Compatibility

If you choose Non-Metals Compatibility from the Main Menu, the Non-Metals Compatibility Query Screen, Figure 16, will be displayed.

SOLVENT HANDBOOK DATABASE SYSTEM
Non-Metals Compatibility Query

Solvent:

Material:

Please enter any values or combination of values
(blank values are valid) and press <query> for
non-metals compatibility information.

Query( ) Exit( )

Figure 16. Non-Metals Compatibility Query Screen.

- Enter any values you want to use to query records.

If you choose the **Exit** option, SHDS will display the Main Menu.

- Choose the **Query** option. SHDS will display Figure 17, the Non-Metals Compatibility List Screen, which shows a list of all records that match the values you entered.
- Highlight the record you want to view.

If you choose the **Exit** option, SHDS will take you back to the Non-Metals Compatibility Query Screen.

- Choose the **View** option. SHDS will display the Non-Metals Compatibility Record Screen (see Figure 18), which shows the information for the record you selected.
- Use the arrow keys or press **<Tab>** to move the cursor to either the Initial scrollable area or the Final scrollable area.

- Choose either the **Initial Specific Comments** option or the **Final Specific Comments** option. SHDS will display comments on the option you selected. If no comments exist, the screen will be blank.
- Choose the **Exit** option to return to the Non-Metals Compatibility Record Screen (Figure 18) for another selection.
- After you have finished viewing information in the Non-Metals Compatibility Record Screen, choose the **Exit** option to return to the Non-Metals Compatibility List Screen (Figure 17) so you can view information on another record.

4.7 Product/Safety

If you choose Product/Safety from the Main Menu, SHDS will display Figure 19, which is the Product/Safety Query Screen.

SOLVENT HANDBOOK DATABASE SYSTEM
Product/Safety Query

Company: _____
Product: _____

Please enter any values or combination of values
(blank values are valid) and press <query> for
product/safety information.

Query( ) Exit( )

Figure 19. Product/Safety Query Screen.

- Enter any values you want to use to query records.

If you choose the **Exit** option, SHDS will take you back to the Main Menu.

- Choose the **Query** option. SHDS will display Figure 20, the Product/Safety List Screen, which shows a list of all records that match the values you entered.
- Highlight the record you want to view.

If you choose the **Exit** option, SHDS will take you back to the Product/Safety Query Screen.

- Choose the **View** option. You will see Figure 21, the Product/Safety Record Screen, which shows the information for the record you selected.
- Choose the **Health Haz** option, the **Incompatibility** option, or the **Control Measures** option. SHDS will display information on the option you selected. If no comments exist, the screen will be blank.
- Choose the **Exit** option to return to the Product/Safety Record Screen (Figure 21).

4.8 Recycle/Recovery

If you choose Recycle/Recovery from the Main Menu, the Recycle/Recovery Query Screen, Figure 22, will be displayed.

```
SOLVENT HANDBOOK DATABASE SYSTEM
Recycle/Recovery Query

Company:
Product:
Procedure:

Please enter any values or combination of values
(blank values are valid) and press <query> for
recycle/recovery information.

Query( ) Exit( )
```

Figure 22. Recycle/Recovery Query Screen.

- Enter any values you want to use to query records.

If you choose the **Exit** option, SHDS will take you back to the Main Menu.

- Choose the **Query** option. the Recycle/Recovery List Screen will appear (see Figure 23), which shows a list of all records that match the values you entered.
- Highlight the record you want to view.

If you choose the **Exit** option, SHDS will take you back to the Recycle/Recovery Query Screen.

- Choose the **View** option. You will see Figure 24, the Recycle/Recovery Record Screen, which shows the information for the record you selected.
- After you have finished viewing information in the Recycle/Recovery Record Screen, choose the **Exit** option. You will be taken back to the Recycle/Recovery List Screen so you can view information on another record.

Recycle/Recovery List		
company	product	procedure

View( ) Top( ) Bottom( ) Exit( )

Figure 23. Recycle/Recovery List Screen.

Recycle/Recovery Record		
Company:		
Product:		
Parameter:	Amount:	
Condition:	Performer:	
Procedure:	Time:	Duration:
Test Date:		
Residue:		
Remarks:		

Exit( )

Figure 24. Recycle/Recovery Record Screen.