

# **ASAP<sup>®</sup> 2460**

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***ACCELERATED SURFACE AREA AND POROSIMETRY SYSTEM***



**micromeritics<sup>®</sup>**

***ERROR MESSAGES***

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Dec 2024

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## ***CORPORATE PROFILE***

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Micromeritics Instrument Corporation is the world's leading supplier of high-performance systems to characterize particles, powders and porous materials with a focus on physical properties, chemical activity, and flow properties. Our technology portfolio includes: pycnometry, adsorption, dynamic chemisorption, particle size, intrusion porosimetry, powder rheology, and activity testing of catalysts. The company has R&D and manufacturing sites in the USA, UK, and Spain, and direct sales and service operations throughout the Americas, Europe, and Asia. Micromeritics systems are the instruments-of-choice in more than 10,000 laboratories of the world's most innovative companies and prestigious government and academic institutions. Our world-class scientists and responsive support teams enable customer success by applying Micromeritics technology to the most demanding applications. For more information, please visit [www.Micromeritics.com](http://www.Micromeritics.com).

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## ***ERROR MESSAGES***

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If the *Action* response indicates to contact a Micromeritics Service Representative, record the error message, then make backup copies of any files involved in the operation.

### **2001 Error generating PDF file for report.**

*Cause:* Software was not correctly installed.

*Action:* Contact your Micromeritics Service Representative.

### **2002 Error printing PDF file for report.**

*Cause A:* Software was not correctly installed.

*Action A:* Contact your Micromeritics Service Representative.

*Cause B:* Network printer connected to instrument is not set up properly.

*Action B:* Contact your Micromeritics Service Representative.

*Cause C:* Unexpected network issue occurred.

*Action C:* Contact your Micromeritics Service Representative.

### **2003 Error generating plot for PDF report.**

*Cause:* Software was not correctly installed.

*Action:* Contact your Micromeritics Service Representative.

### **2010 Error accessing file [n], error code = [n].**

*Cause A:* Media may be damaged.

*Action A:* Clean the media drive. If this does not eliminate the problem, attempt operation using a backup copy of the file.

*Cause B:* Hard disk may be damaged.

*Action B:* Contact your Micromeritics Service Representative.

*Cause C:* An application error occurred when the file was accessed.

*Action C:* Contact your Micromeritics Service Representative.

*Cause D:* The file name specified contains one or more invalid characters.

*Action D:* Enter a valid file name. Do not use characters such as \* or ?. Refer to the operating system manual.

- 2011**      **Cannot register file.**
- 2012**      **Subset not found.**
- 2013**      **Seek within file failed.**
- 2014**      **Bad header in subset file.**
- 2015**      **Subset owner denied access.**
- 2016**      **Not a valid file format.**
- 2017**      **Subset wrote the wrong amount of data.**
- 2018**      **Error reading data.**
- 2019**      **Error writing data.**

*Cause:* An unexpected error occurred when trying to access a data file.

*Action:* Contact your Micromeritics Service Representative.

**2020**      **Error copying sequential data segment.**

*Cause:* An internal processing and/or hardware error occurred while accessing a portion of a sample file.

*Action:* Confirm that the media being accessed does not contain errors. Contact your Micromeritics Service Representative.

**2030**      **Error logger cannot be initialized. Error code [n]. Program will terminate.**

*Cause:* An internal processing and/or hardware error has occurred.

*Action:* Contact your Micromeritics Service Representative.

**2420**      **Invalid defaults. Program will terminate.**

*Cause:* The application .ini file is missing or invalid.

*Action:* Re-install the application from the installation media.

**2421**      **Invalid file subsystem. Program will terminate.**

*Cause:* The application could not read the default method files.

*Action:* Delete the default method files and restart the application

**2432**      **Invalid response from MMI 'FILE\_READ' request.**

*Cause:* An internal processing and/or hardware error has occurred.

*Action:* Contact a Micromeritics Service Representative if this error message continues.

**2433**      **New entries have been found in this directory. Refresh the directory information?**

*Cause:* Several analyzer files have been added to this directory by some function other than the analysis application.

*Action:* Click **Yes** to update the directory information with data from each new file. This operation may take a minute.

Click **No** to locate the file manually. This option may be feasible if a large number of files have been copied into the directory and the file name is known.

**2434**      **File [n] — Subset [n] wrote [n] bytes, expected [n] bytes.**

*Cause:* An internal processing and/or hardware error has occurred.

*Action:* Contact your Micromeritics Service Representative.

**2437**      **File name [n] does not exist.**

**2437**      **Overlay file [n] does not exist.**

*Cause:* The file selected in the report option does not exist.

*Action:* Enter an existing file specification, or select a file name from the list box.

**2438**      **Cannot open scheduling diagnostic data save file: [n].**

*Cause:* The file necessary for **Unit [n] > Diagnostics > Schedule Diagnostic Test** (...\\Hardware\\scheddiagtests.dat) could not be read. It is likely corrupted.

*Action:* Exit the application. Delete or rename the file mentioned in the error message and restart the application . A new file will be created. Also ensure that the hardware directory is not write-protected.

**2448**      **The export data file directory [n] cannot be used. Resetting to the installation directory.**

**2448**      **The reference file directory [n] cannot be used. Resetting to the installation directory.**

**2448**      **Default convert sample file directory [n] is invalid. Resetting to the installation directory.**

**2448**      **Default mass spectrometer file directory [n] is invalid. Resetting to the installation directory.**

- 2448** Default parameter file directory [n] is invalid. Resetting to the installation directory.
- 2448** Problem diagnostic directory [n] is invalid. Resetting to the installation directory.
- 2448** User python script directory [n] is invalid. Resetting to the installation directory.
- 2448** Default report directory [n] is invalid. Resetting to the installation directory.
- 2448** Default sample file directory [n] is invalid. Resetting to the installation directory.
- 2448** The SPC report directory [n] is invalid. Resetting to the installation directory.
- 2448** The z-table file directory [n] cannot be used. Resetting to the installation directory.
- 2448** File directory [n] is invalid. Resetting to the installation directory.
- 2448** Default script test file directory [n] is invalid. Resetting to the installation directory.

*Cause:* A working directory specified in the .INI file is invalid, has been moved or deleted.

*Action:* The installation directory will be substituted. The next time a file is opened, use the directories list to move to the correct directory.

**2449** This field does not contain a valid file specification.

*Cause:* An invalid file name was entered.

*Action:* See the description of file naming conventions in a Windows manual, then re-enter the name.

**2451** The specified folder does not exist.

*Cause:* Path entered in the file selector does not exist.

*Action:* Enter the correct file path, or browse for the correct file path.

**2452** The instrument is busy performing an operation of which this application is unaware. Do you want to cancel?

*Cause:* The instrument is performing an operation which is not recognized by the application.

*Action:* Click **Yes** to have the application cancel the operation. Click **No** to allow the operation to continue.

**2456** Insufficient file handles available. Application cannot continue.



*Cause:* More than 50 files are open at the same time.

*Action:* Refer to a Windows operating system manual then set the limit for open files to 50 or greater. Alternatively, close any unused open files.

**2458 An instrument is performing a critical operation. Wait a few moments before exiting the application.**

*Cause:* An attempt was made to exit the application while the analyzer was performing a critical operation. This operation must be completed before the application can be exited.

*Action:* Wait a short time and attempt to exit the application again.

**2459 An instrument is busy. A delay in restarting this application could result in loss of new data. Continue with program exit?**

*Cause:* An attempt was made to exit the application while an analysis was in progress. While this is possible, the data collected when the application is inactive will not be permanently recorded until the application is restarted. A power failure to the analyzer could cause some data to be lost. Continued data collection may also exhaust the memory of the controller.

*Action:* If not concerned with the potential for loss of data should a power failure occur, click **Yes** to continue; otherwise, click **No**.

**2460 Fatal Communications error on [n].**

*Cause:* There was a fatal error in communication between the application and the software in the analyzer. All displays for that analyzer will be closed.

*Action:* Ensure that the analyzer is connected to the computer on the communications port configured in the *Setup* program. Stop and restart the analyzer application. Contact your Micromeritics Service Representative.

**2461 No instruments are in operation. This application will unconditionally terminate.**

*Cause:* At least one analyzer must be active for the application to operate. The initialization of all analyzers configured with the *Setup* program has failed. The application stops.

*Action A:* Usually this message is preceded by another message giving the reason for the analyzer's failure to initialize. Refer to the instructions for that message.

*Action B:* Ensure that the analyzer is attached to the computer on the communications port configured with the *Setup* program. Verify that the analyzer's power switch is in the ON position and that the light on the front panel is illuminated. Contact a Micro-

meritics Service Representative if this error message continues.

**2477 [n] did not properly initialize.**

*Cause:* The application was unable to initialize this analyzer. This is usually caused by one of the conditions listed in the previous error messages.

*Action:*

- Correct the problem indicated in the previous error message, then restart the application.
- Run the *Setup* program and ensure that a valid port is specified; if not, specify a valid one when prompted.
- Reinstall the application, then restart the application.
- Contact a Micromeritics Service Representative if this error message continues.

**2479 Cannot open [n] because it is a [n] file.**

*Cause:* The file cannot be opened because it came from a different Micromeritics application

*Action:* Select a different file.

**2480 File [n] cannot be analyzed. It is currently being edited.**

*Cause:* An attempt was made to start an analysis using a file that is open for editing.

*Action:* Finish editing the file, save and close it, then start the analysis.

**2481 Error accessing the sample information file [n].**

*Cause A:* An unexplained error prevented access to this file.

*Action A:* The hard disk drive may be corrupt. Run diagnostics.

*Cause B:* An attempt was made open a file that is already open, possibly minimized.

*Action B:* View the minimized icons, locate and maximize the file.

*Cause C:* A computer or network problem occurred.

*Action C:* Check the performance of the computer devices or network.

**2482 File cannot be opened for writing.**

*Cause:* An attempt was made to open a file currently being used.

*Action:* Locate the application using the file. In the Micromeritics application, use the Window menu item for a list of all open windows.

**2483 An analysis cannot be performed on [n]. It is open for editing and contains errors.**

*Cause:* An attempt was made to use a sample file containing errors that is currently open.

*Action:* Go to the window containing the file, correct the errors, then save it.

**2484 The edit session for [n] must be saved before the analysis. Save changes and continue with the analysis?**

*Cause:* An attempt was made to start an analysis using a file that contains unsaved changes and is open for editing.

*Action:* Click **Yes** to save the changes, then proceed with the analysis. Click **No** to cancel the analysis, then continue editing the sample file.

**2485 Sample file [n] has an invalid status and cannot be used for this operation.**

**2485 The service test file has an invalid status and cannot be used for this analysis.**

*Cause:* The selected file has a status other than *No Analysis*.

*Action:* Select a file, or create a new one and click **Replace All** to copy parameters from the file originally selected.

**2486 Cannot construct [n] report type. Program will terminate.**

*Cause A:* Full rights to the application folders and files is required.

*Action A:* Contact a system administrator to have full rights granted.

*Cause B:* An internal processing and/or hardware error has occurred.

*Action B:* Contact your Micromeritics Service Representative.

**2488 File [n] cannot be opened. It is already in use.**

**2488 File [n] cannot be opened for editing.**

*Cause:* The specified file is open for editing.

*Action:* Check the Window menu item to locate the other edit session or check if the file is open in another application.

**2489 File [n] cannot be opened for writing.**

*Cause A:* The specified file in a *Save As* operation is open.

*Action A:* Select a different file for the *Save As* operation.

**2491 Highlighted fields contain errors. Please correct the errors before closing.**

*Cause:* The fields highlighted in red contain invalid entries. The window cannot be closed until all errors are corrected.

*Action:* Check the entries, correct the errors, then close the window.

**2492 This field's entry is invalid.****2493 An entry is required for this field.**

*Cause:* The highlighted field contains an invalid entry.

*Action:* Check the entry and correct the error.

**2494 Value is out of the valid range.****2495 Enter a value between [n] and [n].**

*Cause:* The entered value in the highlighted field is outside the valid range of values.

*Action:* Check the entry, then either enter or select an appropriate value. The valid range is shown in the information bar.

**2496 Invalid number.****2497 This field contains an invalid character.**

*Cause:* An invalid number (or character) was entered in the highlighted field.

*Action:* Check the entry, then either enter or select a valid number (or character).

**2498 The requested change to the Sample's status is invalid at this time.**

*Cause:* A request to change the file status, for example, from *automatically collected* to *manually entered* could not be done.

*Action:* Contact your Micromeritics Service Representative. Record the name of the same file in which the problem occurred.

**2499 Sequence number must contain at least 3 digits.**

*Cause:* An attempt was made to enter a sequence number that did not contain at least three digits.

*Action:* Enter a sequence number that contains at least three digits.

**2500 All sample file names that can be created using the sequence number pattern already exist. You may want to modify the next sequence number.**

*Cause:* No more sample files can be created using the currently entered file name sequence number.

*Action:* Go to **Options > Default Method**, then enter another sequence number.

**2502 The file name must contain a \$ character.**

*Cause:* An error occurred in the file being written to during a print operation.

*Action:* Ensure there is sufficient space on the drive containing the file.

**2506 Sample file [n] has a No Analysis status and cannot be used for this operation.**

*Cause A:* An internal processing error has occurred.

*Action A:* Contact your Micromeritics Service Representative.

*Cause B:* The selected output device is not installed.

*Action B:* Select a different output device.

**2507 The sample has an invalid status and cannot be used for degassing.**

*Cause:* An attempt was made to degas a sample that has a status other than *No Analysis*.

*Action:* Select a sample with a status of *No Analysis*.

**2508 The selected file [n] does not contain a valid script.**

*Cause:* The selected service test file does not contain any steps or the file has become corrupted.

*Action:* If the service test file has no steps, open the service test file and add steps to the file using the *Service Test Script* tab.

**2513 Unable to read the calibration file [n].**

*Cause:* An invalid calibration file was selected or cannot be read.

*Action:* Ensure the media containing the calibration file has no problems.

**2514 Unable to write the calibration file [n].**

*Cause:* An attempt to save calibration data has failed due to possible media problems.

*Action:* Ensure the destination location has no problems or choose an alternate media to save the calibration data.

- 2518**     **Analysis data are not suitable for smoothing. Smoothing has been disabled.**  
*Cause:* The Analysis data contains volume adsorbed values that are less than or equal to zero.  
*Action:* No action required; this is a status message only.
- 2519**     **Entered or merged data must have at least two points with unique mass percent values.**  
*Cause:* Entered or merged data with less than two data points cannot be smoothed. This message may refer to the number of points in the repeat analysis if it is selected for reporting.  
*Action:* No action required; this is a status message only.
- 2520**     **No data points available for reporting.**  
*Cause:* The selected sample file does not have collected data and cannot be used for reporting.  
*Action:* Select a different sample file.
- 2521**     **Unable to program controller.**  
*Cause:* A hardware malfunction has occurred.  
*Action:* Contact your Micromeritics Service Representative.
- 2522**     **Invalid controller application file.**  
*Cause:* The application's control file has been corrupted or deleted.  
*Action:* Reinstall the analysis program.
- 2523**     **Programming the controller failed.**
- 2524**     **CRC check failed on programming controller.**
- 2525**     **Unknown error programming controller.**
- 2526**     **Controller download was not successful.**
- 2527**     **Controller CRC error on boot block.**
- 2528**     **Controller DRAM error.**
- 2529**     **Controller Com 1: error.**
- 2530**     **Controller Com 2: error.**

**2531 Controller debug port error.**

*Cause:* An internal processing and/or hardware error has occurred.

*Action:* Contact a Micromeritics Service Representative if this error message continues.

**2532 The instrument contains a different software version. Do you want to reset it?**

*Cause:* The application has discovered a different version of application operating in the analyzer.

*Action:* If there are no analyzers other than the one connected to the computer, click **Yes**, then allow the updated application to load.

**2533 Analyzer initialization failed.**

*Cause:* An internal processing and/or hardware error has occurred.

*Action:* Contact your Micromeritics Service Representative.

**2534 Unable to establish the TCP connection with [n].****2534 Unable to establish the TCP connection with the instrument.**

*Cause:* There was a problem establishing communication with the analyzer.

*Action:* Ensure that the communications cable is seated firmly in the Ethernet slot at the analyzer connection and the computer connection.

Ensure that no other Micromeritics application is initializing another analyzer. If there is another Micromeritics application open and initializing an analyzer, wait until the analyzer initialization completes or is canceled.

Contact a Micromeritics Service Representative if this error message continues.

**2542 The file [n] could not be written. Check that the directory permissions are correct.**

*Cause:* The person logged into the computer does not have write access to the program and/or data directory.

*Action:* Contact your system administrator set up proper privileges for all users

**2548 System status 1 [n].****2548 System status 2 [n].**

*Cause:* There was a problem establishing communication with the analyzer.

*Action:* Ensure that the communications cable is seated firmly in the Ethernet slot at the analyzer connection and the computer connection. Contact your Micromeritics Service Representative.

**2549 Error accessing online manual file [n].**

*Cause:* The Operator Manual file could not be located.

*Action A:* Reinstall the application.

*Action B:* Copy the contents of the manual folder from the setup media to the application directory.

**2551 Cannot access web page [n].**

*Cause:* The Micromeritics web page for DFT models cannot be accessed. This could be caused by an ISP problem of high internet traffic.

*Action:* Try the operation later.

**2552 Configured serial number does not match instrument.**

*Cause:* An analyzer was substituted without properly changing the analyzer serial number.

*Action:* Use the installation program to add or move devices as necessary.

**2553 Dialog ID [n] can not be created.**

*Cause:* A required window could not be found by the application.

*Action:* Re-install the application.

**2554 File [n] does not contain any report data.**

*Cause:* The selected sample file has no reports selected for printing.

*Action:* Edit the sample file and select reports to print in *Report Options*.

**2556 File [n] cannot be opened. It is currently selected for analysis.**

*Cause:* The sample file is currently selected and is undergoing a critical operation.

*Action:* Open the sample file after the critical operation has completed.

**2557 Directory [n] does not exist.**

*Cause:* The directory entered in a file selector is not valid.



*Action:* Enter a valid directory.

**2558 The instrument is busy. The requested operation cannot be executed.**

*Cause:* The analyzer is analyzing and cannot be interrupted.

*Action:* Try the operation later.

**2560 File [n] cannot be created or opened. It has an unrecognized extension.**

**2560 File [n] cannot be created. It has an unrecognized extension.**

*Cause:* The extension specified in the file you are trying to create is not one which is recognized by the application.

*Action:* Change the extension of the file in the file name field of the file selector.

**2563 Cannot write. File or directory [n] read only.**

*Cause:* The specified file name is marked as read-only

*Action:* Select a different file name.

**2564 Directory database [n] error [n].**

*Cause:* There is a problem creating the directory file used in file selectors.

*Action:* Verify the directory specified in this message is not marked read-only.

**2570 Instrument log database could not be opened: [n]**

**2571 Instrument log database [n] error [n].**

*Cause:* There is a problem opening the analyzer log file [SN.LOG].

*Action:* Exit the application. Go to the \HARDWARE subdirectory of the analyzer's program directory and rename the [SN.LOG] file where SN is the serial number of the analyzer. A new log file will be created.

**2572 File [n] already selected for the analysis.**

*Cause:* The file selected for analysis on one port has already been specified for another port.

*Action:* Select a different sample file for each port.

**2573 A maximum of [n] files may be selected.**

**2573 A maximum of [n] files may be selected for analysis.**

*Cause:* When using one file selector to select samples for all ports, the number of samples selected exceeds the number of ports on the analyzer.

*Action:* Select the proper number of samples or pick the sample for each port individually.

**2574 No samples, entered samples, or completed samples selected.**

*Cause:* When using one file selector to select samples for all ports, either no samples were selected or a file with *Complete* status was selected.

*Action:* Select samples that do not have a *Complete* status.

**2575 The application is running an analysis of which the instrument is unaware. The analysis will be restarted and canceled to ensure that the instrument is in a safe state.**

*Cause:* The analyzer was power cycled or rebooted during an analysis.

*Action:* Allow the termination to complete and run the analysis again.

**2576 The instrument [n] is not calibrated.**

*Cause:* The analyzer application is in the process of initializing the analyzer and is unable to locate the calibration files.

*Action A:* Click **OK**. Go to **Unit [n] > Calibration > Load from File**, then select a file containing calibration data.

*Action B:* Click **OK**. Close the application, then use the *Setup* program to reinstall calibration files.

**2577 The python directory is missing or some of its contents have been removed.**

*Cause:* When using *Advanced* reports, a necessary component is missing.

*Action:* Re-install the application.

**2578 Not enough available resources. Application will have reduced functionality. Reduce the number of open files or report windows.**

*Cause:* There is not enough memory available to open the requested window.

*Action:* Close any unnecessary applications, then try the operation again.

**2579 The selected file has a status that is not compatible with the operation reques-**

ted.

*Cause:* The selected sample file cannot be used for the selected operation. For example, a sample file with a *Complete* status cannot be used for analysis.

*Action:* Select a different sample file.

**2584 The application encountered an unexpected error and will be halted.**

*Cause:* : Files necessary for the application are missing or have been corrupted.

*Action:* Re-install application.

**2585 Please re-install to make use of Windows libraries for file management. The following libraries are missing: [n]**

*Cause:* This message is triggered on application start up if any of the library files used by an application do not exist on disk.

*Action:* Add the library into the libraries folder.

**2586 Sample file [n] has no pressure table entries.**

**2587 Sample file [n] has no dose increment table entries.**

*Cause:* Trying to analyze a sample file with no pressure entries in *Analysis Conditions*.

*Action:* Either edit the *Analysis Conditions* and enter the pressure points to be used for analysis, or select a sample file that already has the pressure points entered.

**2588 Sample file [n] is a [n] file and can not be analyzed on this instrument.**

*Cause:* The specified sample file is from another Micromeritics application which is not usable with this application.

*Action:* Select a different sample file.

**2589 Sample file [n] can not be analyzed on this instrument.**

*Cause:* The file specified for analysis cannot be used.

*Action:* Select a different file.

**2590 The default sample file [n] cannot be selected.**

**2590 The default sample file [n] can not be overwritten.**

**2590 An error occurred accessing file or directory [n].**

*Cause:* The default sample file (default method) cannot be used in this operation (e.g., as a sample file for analysis).

*Action:* Select a different sample file from the data directory.

**2591 Cannot open problem diagnostic data save file: [n].**

*Cause:* The file necessary for **Unit [n] > Diagnostics > Schedule Diagnostic Test** (\Hardware\probdiag.dat) could not be read. It is likely corrupted.

*Action:* Exit the application. Delete or rename the file mentioned in the error message and restart the application. A new file will be created.

**2592 The selected file has an extension that is not supported by this operation.**

*Cause:* The selected file does not have a supported file extension.

*Action:* Open the adsorptive properties file. Open the .FPI file selector and select another file with a supported file extension.

**2593 Warning: The selected file uses Unicode (UTF-8 or UTF-16LE) encoding with non-ASCII characters.**

**2594 The selected file uses Unicode [UTF-16BE or UTF-32) encoding and could not be read.**

*Cause:* The *Advanced* report is not saved in ASCII format, which is required by Python.

*Action:* Edit the file and save it in ASCII (ANSI) format.

**2595 The selected file is too large (maximum allowed size is [n]).**

*Cause:* The *Advanced* report is too large.

*Action:* Edit the file and reduce the size.

**2596 Can not find a file selected for analysis: [n]**

*Cause:* A sample file for a currently running analysis was moved or deleted while the application was closed.

*Action:* The analysis may not complete correctly. If this occurs, close the application and cycle power on the analyzer using the analyzer power switch. Contact a Micromeritics Service Representative if this error message continues.

**2607 Default sample file [n] is invalid. Try deleting it and restarting the application.**

*Cause:* The default sample file is invalid.

*Action:* Delete the default sample file from the applications directory and restart the application.

**2608 Default sample file [n] is not writable. Program will terminate.**

*Cause:* The default sample file has been set to read only.

*Action:* Disable the read only setting from the default sample file or delete the default sample file from the applications directory and restart the application.

**2609 Preview data has been truncated due to length. Consider exporting directly to a printer or to a text, PDF, or XML file.**

*Cause:* A preview report was produced with a data set that is too large to display.

*Action:* Export or print the report to see all the data.

**2610 Failed to create directory [n].**

*Cause:* Bad permissions for selected directory.

*Action:* Ensure that permissions on the parent directory of the selected folder match the permissions of the installation directory. If they do, contact your Micromeritics Service Representative.

**2611 Browsing outside of the configured location is not allowed.**

*Cause:* File browsing is limited to the application directory and custom repository location if one was specified during installation.

*Action:* Restrict file browsing to the allowed locations. No user should be able to browse outside the installation directory or custom repository location when using the application.

**2612 File [n] cannot be created by [n]. It is a restricted file type.**

**2613 File [n] cannot be modified by [n]. It is a restricted file type.**

*Cause:* Confirm Analyst accounts cannot open, create, or modify parameter files.

*Action:* Use a Confirm Developer account to open, create, or modify parameter files.

**2614 File [n] cannot be modified by [n]. An error in the audit trail occurred. Changes cannot be saved.**

*Cause:* The Confirm sample audit trail could not be written, preventing changes to the sample file.

*Action:* Contact your Micromeritics Service Representative.

**2615 [n] cannot belong to both the analyst and developer group in order to run this application. Program will terminate.**

*Cause:* The user attempting to log on to the Confirm application cannot be a member of both the Confirm developer group and the Confirm analyst group.

*Action:* In Windows Users and Groups, verify that the user does not belong to both groups.

**2616 [n] must belong to the analyst or developer group in order to run this application. Program will terminate.**

*Cause:* The user attempting to log on to the Confirm application must be a member of either the Confirm developer group or the Confirm analyst group.

*Action:* In Windows Users and Groups, verify that the user belongs to one of the groups.

**2617 [n] has been locked out. Please contact your system administrator.**

*Cause:* The user has attempted to log in to the Confirm application too many times and the user account has been locked.

*Action:* Contact your system administrator to unlock the user account.

**2618 Application will be terminated due to an error [n] during a password update for [n]. Please contact the system administrator to change the password manually.**

**2619 Failed to automatically update password for [n]. Please contact the system administrator to change the password manually.**

*Cause:* An unsuccessful attempt was made to update the password for the specified user.

*Action:* Contact the system administrator to change the password manually in Windows Users and Groups.

**2620 Too many environment variables in use. Reduce the number of Windows environment variables.**

*Cause:* An attempt was made to use too many Windows environment variables.

*Action:* Ensure the total number of characters in the Windows environment does not exceed 5120 characters.

**2621 Large environment variables found. Remove any environment variables exceeding 2048 characters.**

*Cause:* Environment variables are too large.

*Action:* Ensure there are no long environment variables.

**2622 Critical error [n] encountered. The application may not work as expected.**

*Cause:* An attempt was made to run the Confirm application in a Windows environment other than Windows 10 Professional or Windows 10 Enterprise or higher.

*Action:* Run the Confirm application in a Windows 10 Professional or Windows 10 Enterprise or higher environment only. If you are already running the required operating system, contact your Micromeritics Service Representative.

**2623 Application will be terminated due to an error [n] in acquiring a windows cryptographic context.**

*Cause:* An attempt was made to acquire a Windows cryptographic context and the process failed.

*Action:* Contact your Micromeritics Service Representative.

**2624 Application will be terminated due to an error [n] in generating a random password.**

*Cause:* The Confirm application failed to generate a random password for the specified user.

*Action:* Manually create a password in Windows Users and Groups.

**2625 Application will be terminated due to an error [n] in acquiring a windows cryptographic service context.**

*Cause:* An attempt was made to acquire a Windows cryptographic service context and the process failed.

*Action:* Contact your Micromeritics Service Representative.

**2626 Could not retrieve logged in username or domain.**

*Cause:* The installation process failed.

*Action:* Reinstall the Confirm application by using the default installer options. Contact a Micromeritics Service Representative if this error message continues.

**2627 Error opening communications port for the balance.**

*Cause:* Serial communications with a balance could not be established.

*Action:* Ensure the cable is attached to the balance and the computer. Ensure the balance is powered on and that the settings in **Options > Configure Balance** are correct.

**2628 Incorrect password for [n].**

*Cause:* An incorrect password was entered when an attempt was made to start an analysis.

*Action:* Re-enter the correct password.

**2629 The application controller [n] must not belong to either the analyst or developer group in order to run this application. Program will terminate.**

*Cause:* The application controller was placed in the analyst or developer group (or both).

*Action:* Remove the application controller from the group(s).

**2630 Failed to get user account information [n].****2631 Failed to acquire credentials handle [n].****2632 Failed to initialize security context [n].****2633 Failed to complete authorizing token [n].****2634 Unsupported operation to authorize token [n].****2635 Failed to accept security context [n].****2636 Cannot log in as a guest. [n]****2637 Application will be terminated due to an error [n] in decryption.****2638 Error handling new user credentials [n].****2639 Error handling password expiration [n].****2640 Timeout error [n].****2644 Application will be terminated due to an error [n] in initializing the controller process.**

*Cause:* Refer to the error code provided.

*Action:* Contact your Micromeritics Service Representative.

**2649 The models cannot be located in the models folder. Re-install the software.**

*Cause:* The models could not be located. They may have been inadvertently deleted or moved.



*Action:* Reinstall the application.

**3000 No common pressure ranges were found in the file selected for averaging.**

*Cause:* Samples selected for averaging do not have any cycles with common pressure ranges.

*Action:* Select samples that were analyzed with similar pressures

**3001 The data set has no overlapping intrusion cycles. Reverberi calculations cannot be performed.**

*Cause:* The intrusion cycles in the data set used to perform Reverberi calculations do not overlap.

*Action:* Select a different data set, or change the selection range so as to include a region of the Cumulative Intrusion vs Pressure plot where the intrusion cycles overlap (can be set in the Reverberi interactive plot).

**3002 The Mayer-Stowe calculation could not be performed. Valid bulk or skeletal densities are unavailable.**

*Cause A:* Negative or otherwise unphysical bulk and/or skeletal densities were provided.

*Action A:* Confirm that the material properties entered in the sample description are correct.

*Cause B:* The prepared data was deleted, or could not be read.

*Action B:* Re-enter data by copying and pasting from a columnated text file. Check that the data is formatted as described in the operator manual.

**3010 Blank correction information not loaded from [n]. An error occurred while accessing it.**

**3011 Blank correction information not loaded from [n]. It contains no valid data.**

*Cause:* The file was not a valid file or could not be accessed.

*Action:* Ensure it is valid, and you have rights to it

**3012 Negative intrusion/extrusion data were excluded from the stored blank correction data.**

*Cause:* The selected blank file has negative intrusion volumes.

*Action A:* Ignore the warning. Each negative blank volume will be replaced with the previous positive volume before subtracting.

*Action B:* Open the blank file and select *Report Negative Intrusion* in the collected data intru-

sion data.

*Action C:* Select a blank that does not have negative volumes.

**3020 A tabular data-set was specified for the tabular report. None of the collected data is within the bounds of the table.**

*Cause:* The tabular data-set range does not overlap the range used for interpolation. The statistics calculations depend on these bounds and may not accurately represent the tabular data.

*Action:* Change the interpolation bounds (intrusion report options editor or interactive plot) or insert/append entries to the tabular data-set (tabular report options editor) so that the collected data selection falls within the bounds of the tabular data-set.

**3021 A tabular data-set had unexpected ordering. The application has attempted to correct for this.**

*Cause:* The user-defined table of pressures, pore sizes, or percents was listed in an unexpected order. The application reversed the order to the expected ordering so that results are sensible.

*Action:* If the interpolation is needed only for the intrusion branch, then no action is required. However, if interpolation is also needed for an extrusion branch then the data must be reordered according to what is specified in the window

**3022 A tabular data-set is imposing a narrower range of data than the collected data range. The percent intrusion tabular data will differ from the collected data percent intrusion.**

*Cause:* The tabular data-set range is shorter than the data-set range used for interpolation. The statistics calculations depend on these bounds and may not accurately represent the tabular data.

*Action:* Narrow the interpolation bounds (intrusion report options editor or interactive plot) or insert/append entries to the tabular data-set (tabular report options editor) so that the collected data selection falls within the bounds of the tabular data-set

**3023 The Assembly mass, Sample mass, Penetrometer mass or Penetrometer volume may be incorrect. Please verify these quantities.**

*Cause A:* Computed negative mass of mercury.

*Action A:* Check that the penetrometer volume and mass entries are correct.

*Cause B:* Computed unphysical porosity values

*Action B:* Change the selection range so that at least 1 datapoint is within the range.

**3024 Error preparing data. The number of intrusion cycles or data points in the sample file exceed the maximum allowed.**

*Cause A:* There are over 100 intrusion cycles.

*Cause B:* There are more than 2500 data points.

*Action:* Run the analysis with fewer than 100 intrusion cycles and/or collect fewer than 2500 datapoints.

**3025 Data selection by particle size requires entered 'bulk density' and 'effective particle density' on the material properties dialog.**

*Cause:* The application is attempting to select data via Particle size range on the intrusion data options window. The checkbox *Use entered density* on the *Material Properties* window is required to be selected and both the *Bulk density* and *Particle density* fields must be completed.

*Action:* Select either the *Use entered density* and enter values for the bulk and effective particle density, or change the data selection method to *Pressure* or *Pore size* as these choices do not require entered densities.

**4002 Thermal Transpiration correction had no effect.**

*Cause:* The *Thermal transpiration correction* option was selected on the *Report Options* window; however, the correction did not change any pressure by more than one percent.

*Action:* Deselect this option to disable this message. This correction is only meaningful for very low pressures

**4003 Error obtaining relative pressures. Check [n] setting.**

**4004 Error computing quantity adsorbed.**

*Cause:* An internal processing and/or hardware error occurred during report generation.

*Action:* Contact your Micromeritics Service Representative.

**4005 Pressures were not smoothed. Not enough pressures below 0.10 [n].**

*Cause:* The *Smooth pressures below 0.10 P/P<sub>0</sub>* option was selected on the *Report Options* window. There must be at least 10 pressures within this range for smoothing to occur.

*Action:* Deselect this option to disable this message.

**4014 File [n] is not a valid file for conversion.**

*Cause:* The file selected for conversion is not a valid file.

*Action:* Select only files that have been created by the proper program.

**4015 Error creating export file for sample [n].**

*Cause:* A file error occurred during creation of an export output file.

*Action:* The output file name may be invalid. Ensure that the target directory exists and is not full or write protected. The target disk drive may be damaged or inoperative. Verify that other files may be created on the same drive. Contact your Micromeritics Service Representative.

**4016 Sample [n] has no data for export.**

*Cause:* The file selected for export has a status of *No Analysis*. No export file will be created.

*Action:* Select a file which contains analysis data.

**4017 Damage to the instrument will result if the sample [n] has not been manually evacuated. Have you evacuated the sample?**

**4020 Disabling this option may damage the instrument. Are you sure that the sample should not be backfilled?**

*Cause:* *Backfill sample at start of analysis* was not selected on the *Sample Backfill Options* window. The sample tube is normally at atmospheric pressure when an analysis is started; it must be backfilled before the analysis begins to prevent sample material from being drawn into the manifold.

*Action:* To manually evacuate the sample prior to the start of the analysis, click **Yes**. Otherwise, click **No**, go to the *Sample Backfill Options* window, then *select Backfill sample at start of analysis*.

**4025 There is no [n] attached to the unit.**

*Cause:* The gas shown in the error message is specified in *Analysis Conditions* but is not connected to the unit.

*Action:* Go to **Unit [n] > Unit Configuration**, then enter the gas.

**4026 Cannot calculate Dubinin-Astakhov: bad least squares data.**

*Cause:* Less than two selected data points are within the fitted pressure range.

*Action:* Edit the selection of data points on the Dubinin interactive editor or on the Dubinin Pressures window.

**4028 Dubinin calculations cannot be performed because the affinity coefficient of the analysis gas is zero.**

*Cause:* Dubinin values could not be calculated because the affinity coefficient of the analysis gas is zero.

*Action:* Access the *Dubinin Report Adsorptive* options in the sample file, then enter an appropriate value for the analysis gas.

**4029 At least two fitted data points are needed for Alpha-S calculations.**

*Cause:* Fewer than two data points fall within the selected Alpha-S range.

*Action:* Edit either the calculation pressure in the fitted Alpha-S range, or use a different reference curve.

**4031 Not enough points with a relative pressure in the range [n].**

*Cause:* Fewer than two data points selected for the Dubinin report fall within the selected relative pressure range.

*Action:* Edit the calculation pressure range or the fitted relative pressure range.

**4033 Not enough points to generate Dubinin Tabular Report.**

*Cause:* There are fewer than two valid data points available for the Dubinin tabular reports.

*Action:* At least two micropore pressures must be selected for inclusion in the Dubinin report. Edit the selection of data points on the Dubinin interactive editor or on the Dubinin Pressures window.

**4034 Fewer than 2 points available for Dubinin calculations.**

*Cause:* There are fewer than two valid data points available for Dubinin reports in one of the sample files selected for overlaying.

*Action:* At least two micropore pressures must be selected for inclusion in the Dubinin report. Edit the selection of data points on the Dubinin interactive editor or on the Dubinin Pressures window.

**4035 Cannot calculate optimized Astakhov exponent.**

*Cause:* There are fewer than two valid data points in the relative pressure range specified. Astakhov reports will not be produced.

*Action:* At least two pressures must be selected for inclusion in the Astakhov report. Edit the selection of data points on the Astakhov interactive editor or on the Astakhov Pressures window.

**4036 Fewer than 2 points available for Horvath-Kawazoe calculations.**

*Cause:* At least two data points must be selected for inclusion in the Horvath-Kawazoe analysis. No report will be produced.

*Action:* Edit the selection of points on the Horvath-Kawazoe interactive editor or on the Horvath-Kawazoe window.

**4038 Fewer than 2 points available for the Langmuir Qm computation.**

*Cause:* The *Cheng/Yang correction* to the Horvath-Kawazoe equation requires the value of the monolayer volume as calculated from the Langmuir equation. The isotherm must include at least two points above 0.02 relative pressure for the Langmuir equation to be applied.

*Action:* The analysis will be performed without the Cheng/Yang correction. Deselect *Apply Cheng/Yang correction* on the *Horvath-Kawazoe Report Options* window to prevent this message from appearing on future reports.

**4039 The isotherm does not meet the constraints of the Cheng/Yang assumption.**

*Cause:* The *Cheng/Yang correction* to the Horvath-Kawazoe equation requires the value of the monolayer volume as calculated from the Langmuir equation. The isotherm does not correlate to the Langmuir assumption with a coefficient of 0.98 or more. The correction is not applicable to this isotherm or to the range of the data points selected.

*Action A:* The analysis will be performed without the *Cheng/Yang correction*. Deselect *Apply Cheng/Yang correction* on the *Horvath-Kawazoe Report Options* window to prevent this message from appearing on future reports.

*Action B:* Generate the Langmuir report for the same data points selected for the Horvath-Kawazoe report. If the Langmuir correlation coefficient can be brought above 0.98 by removing some points at high relative pressure, remove them, then reproduce the Horvath-Kawazoe reports.

**4040 The value of Qm computed from the Langmuir equation is too low.**

*Cause:* The *Cheng/Yang correction* to the Horvath-Kawazoe equation requires the value of the monolayer volume as calculated from the Langmuir equation. The computed value is less than the volume adsorbed at the largest relative pressure included in the analysis. The correction is not applicable to this isotherm or to the range of the data points selected.

*Action:* The analysis will be performed and the *Cheng/Yang correction* will be applied to all points with a volume adsorbed less than the value of  $V_m$ . The pore size will not be calculated for data points with an invalid volume adsorbed. Deselect *Apply*

*Cheng/Yang correction* on the Horvath-Kawazoe *Report Options* window to clear this message.

**4041 The Cheng-Yang correction is inappropriate for some [n].**

*Cause:* The Cheng/Yang correction is usually inappropriate for any  $P/P_0$  above the isotherm knee. In some instances, the computed pore sizes may decrease above the knee. While it is possible to include these relative pressures (usually above 0.1  $P/P_0$ ) in the analysis, the computed pore sizes for these pressures are usually meaningless.

*Action:* Change the data points selected for the Horvath-Kawazoe report to include only relative pressures at or below the knee of the isotherm, or change the Horvath-Kawazoe report options so that the Cheng/Yang correction is not applied.

**4044 Points in the Langmuir report pressure table lie outside the collected data.**

**4045 Points in the report pressure table lie outside the collected data.**

*Cause:* Calculation pressure range is not being used. More than one of the report pressure table points is above the range of the collected data and more than one is below.

*Action:* Change the report pressure table to be more consistent with the collected data.

**4046 [n] could not be opened for reading.**

*Cause:* A thickness curve file could not be opened.

*Action:* If the problem persists, restart the computer, then optionally perform a media integrity check.

**4047 Warning: An error occurred while reading [n].**

*Cause:* An error happened during a read operation of a thickness curve file.

*Action:* If the problem persists, restart the computer, then optionally perform a media integrity check.

**4052 Fewer than two points are selected for this report.**

**4052 Fewer than three points provided to the interpolation table.**

**4052 Fewer than three points are selected for this report.**

*Cause:* At least two (or three) points are required for the BET calculations.

*Action:* Edit the calculation range in the BET report.

**4053 At least two data points must be selected for t-Plot calculations.**

*Cause:* At least two points are required for the t-Plot calculations.

*Action:* Edit the calculation range for the t-Plot report.

**4054 Fewer than two data points are inside the fitted thickness range.**

*Cause:* At least two points must be within the fitted thickness range for the t-Plot calculations.

*Action A:* Edit the calculation range for the t-Plot report.

*Action B:* Edit the fitted thickness range in the t-Plot report editor.

**4055 A positive BET surface area was not calculated. Please check your BET Report.****4056 A positive Langmuir surface area was not calculated. Please check your Langmuir report.**

*Cause:* Fewer than two points were assigned to the requested surface area calculation in the collected data table.

*Action A:* Assign more points to the surface area calculation.

*Action B:* Select a different surface area in the t-Plot report editor.

**4057 At least two data points are needed for Freundlich calculations.****4058 At least two data points are needed for Temkin calculations.**

*Cause:* Less than two data points have been selected for the specified report; at least two are required.

*Action:* Edit the selection of points on the report's interactive editor or on the *Pressures* window for the specified report.

**4059 Fewer than 2 points available for MP-Method calculations.**

*Cause:* At least two points are required for the MP-Method calculations.

*Action:* Edit the calculation range for the MP-Method report.

**4060 Sample [n] contains no data points.**

*Cause:* An attempt was made to save a sample without collected data as a t-curve or Alpha-S curve.

*Action:* Repeat the *Save As t-curve* or *Save As Alpha-S* operation after opening a sample that has collected data.



**4061 The t-curve must contain at least 2 points.**

*Cause:* At least two points are required in a thickness curve definition.

*Action:* Edit the thickness curve.

**4062 Error during report preparation.**

*Cause:* An internal processing error has occurred.

*Action:* Contact your Micromeritics Service Representative.

**4063 No subreports selected.**

*Cause:* A report (e.g. BJH) comprised of several reports has no subreport selected.

*Action:* Edit the report in *Report Options* and select at least one subreport.

**4067 No data points are within the range of pressures in the reference isotherm.**

*Cause:* There are no collected data points within the range of pressures in the reference isotherm.

*Action:* Select data points in the range of the reference isotherm, or select a more appropriate reference isotherm.

**4068 No points were selected for the f-Ratio report.**

*Cause:* The *f-Ratio* report does not have any points selected.

*Action:* Edit the selection of data points on the f-Ratio window.

**4070 Unable to load deconvolution model [n].**

*Cause:* The list of available models was corrupted; therefore, the model selected could not be loaded for the deconvolution.

*Action:* Exit the application. Reinstall the application, then try again.

**4071 The selected pressures points do not form a valid set for deconvolution.**

*Cause:* The data points selected for analysis do not contain enough information to allow a DFT data reduction.

*Action:* At least two points with strictly increasing pressures and volumes adsorbed are required for a DFT Plus data reduction. Edit the selection of data points on the DFT interactive editor or on the DFT Pressures window.

**4072 The range of pressures selected is too small to deconvolute using this model.**

*Cause:* A null result was found using the selected model.

*Action:* At least two points with strictly increasing pressures and volumes adsorbed are required for a DFT Plus data reduction. Edit the selection of data points on the DFT interactive editor or on the DFT Pressures window.

**2649 The models cannot be located in the models folder. Re-install the software.**

*Cause:* The models could not be located. They may have been inadvertently deleted or moved.

*Action:* Reinstall the application.

**4077 Cannot get surface area for [n].**

*Cause:* The Isotherm report for the named overlay file has *Per gram* selected for the *Volume Adsorbed*, and the Isotherm report for the primary file has a surface area option selected for the *Volume Adsorbed*.

*Action A:* Edit the Isotherm report for the named overlay file, then select a surface area option for *Volume Adsorbed*.

*Action B:* Click **Overlays** on the *Report Options* window of the primary file, then remove the named overlay file from the list.

**4078 Slope and Y-Intercept cannot be determined from the selected points.**

*Cause:* The Langmuir report cannot be generated from the selected points.

*Action:* Edit the calculation pressure range in the Langmuir report pressure window.

**4080 The compressibility factor table has [n] pressure entries. Only [n] are allowed.**

*Cause:* The fluid property information file has too many rows of compressibility information.

*Action:* Delete rows for pressures that are not likely to be encountered in the analysis.

**4090 The compressibility factor table for [n] is empty.**

*Cause:* The fluid property information in the file selected for analysis does not have any compressibility factors.

*Action:* Update the adsorptive properties files using a different fluid properties file.

**4115 The [n] gas in sample file [n] does not match any gas in the unit.**

*Cause:* The selected gas for the  $P_0$  and  $T$  for the *Analysis Conditions* is not one of the gases connected to the analyzer. Go to **Unit [n] > Unit Configuration** and verify the gas.

*Action:* Edit the *Analysis Conditions*  $P_0$  and  $T$  and change the gas to one which is connected to the analyzer.

**4117 The [n] gas in sample file [n] does not match any gas in the unit.**

*Cause:* The adsorptive selected for the analysis is not one of the gases connected to the analyzer.

*Action A:* Go to **Unit [n] > Unit Configuration** and verify the gas.

*Action B:* Edit the *Analysis Conditions* and change the adsorptive to one which is connected to the analyzer

**4127 The compressibility factor table has [n] temperature entries. Only [n] are allowed.**

*Cause:* The fluid property information file has too many columns of compressibility information.

*Action:* Delete columns for temperatures that are not likely to be encountered in the analysis.

**4128 Error reading from [n].**

*Cause:* There was an error importing data from the Clipboard using copy/paste.

*Action:* Retry the operation.

**4143 NIST REFPROP not available.**

*Cause:* The AppDir/refprop.dll file or the AppDir/fluids file has been renamed or removed from the application directory.

*Action:* Reinstall the analysis application.

**4144 Horvath-Kawazoe calculations failed. The bath temperature is zero.**

*Cause:* The sample analysis temperature could not be calculated (and returns zero), or the analysis temperature was entered as zero.

*Action:* Check the sample's  $P_0$  and  $T$  options.

**4145 Preparations failed in primary data.**

*Cause:* The data preparation failed for a report for either the selected sample file or an overlay used by the report.

*Action:* If this message references an overlay file, the report may still be printed for the selected sample file.

**4146 Fewer than 2 points available for [n] calculations.**

*Cause:* Calculations failed for overlays in the BJH report.

*Action:* Continue printing the report for the primary data.

**4147 No [n] reports. Fewer than 2 points meet [n] criteria.**

*Cause:* Not enough data points are found with pressures and volumes Adsorbed monotonically increasing (adsorption) or monotonically decreasing (desorption) for the BJH report.

*Action:* Select a different sample file.

**4148 Calculations failed for [n] overlay data.**

**4148 Calculations failed for [n] primary data.**

*Cause:* Calculations failed for overlays in the BJH report.

*Action:* Continue printing the report for the primary data.

**4149 No valid points resulted from [n] calculations.**

*Cause:* The BJH calculation resulted in no pore size diameters

*Action:* The isotherm passed to the calculation had invalid data or not enough data.

**4150 No points within the specified [n] pore size interval.**

*Cause:* A BJH min/max pore diameter range selection which is too narrow.

*Action:* Make the pore diameter range wider.

**4151 Isotherm calculation called with no points available.**

*Cause:* Not enough valid data points are available for the Isotherm report.

*Action:* Select a different sample file.

**4152 The adsorbate property factor must be positive nonzero.**

*Cause:* The adsorbate property factor (APF) was not selected or is zero.

*Action:* Select the appropriate adsorptive in the BJH report options and ensure the APF value is entered.

**4153 The density conversion factor must be positive nonzero.**

*Cause:* The density conversion factor (DCF) for the analysis gas was not entered, is zero, or the gas is non-condensing at the analysis temperature.

*Action:* If the gas is non-condensing, then the BJH report is not-applicable. If the analyzer has the .FPI file option, ensure that the appropriate gas (.fpi file) is selected. Otherwise, ensure the *Adsorptive Properties* on the *Analysis Conditions* tab lists a positive DCF.

**4154 [n] could not be read.**

*Cause:* The file is corrupt or not a sample file.

*Action:* Select a different file.

**4155 [n] does not have physisorption data.**

*Cause:* Only physisorption data can be combined. The named file does not have any data, or has data that is not from a physisorption analysis.

*Action:* Select only files from physisorption analyses.

**4156 All files must use the same target pressure type: absolute or relative.**

*Cause:* At least one file has data taken with a target pressure type that differs from the others.

*Action:* Select files that have the pressure type: all relative or all absolute.

**4157 The selected data sets do not have enough overlap in the [n] branch.**

**4158 The selected data sets do not include a full adsorption/desorption isotherm with no cycles.**

*Cause:* Data sets must have overlapping pressure ranges so they can be matched. One point in the range of another data set is typically sufficient. More points in the overlap range allows better matching.

*Action:* Select files with overlapping pressure ranges.

**4159 The scanning cycles do not stay within the bounds of the full isotherm.**

*Cause:* Scanning data must be bounded by the full isotherm. This error is shown if any quantity adsorbed in a scanning adsorption branch falls below the full adsorption isotherm, or if any quantity adsorbed in a scanning desorption branch exceeds the full desorption isotherm, by more than 5%. This check is done after matching the scanning data to the full isotherm.

*Action:* Ensure that the scanning data are from the same sample and taken using the same conditions as the full isotherm. Check the data for outliers.

**4160 HPVA sample conversion failed. File [n] is missing or unreadable.**

*Cause:* An attempt was made to convert an HPVA sample (.Hlsh file extension) into the MicroActive (.SMP file extension) sample format. The specified file was unavailable or could not be read successfully.

*Action:* Ensure the file's permissions allow reading of the file and the file is not open in another application. If the error persists, contact a Particulate Systems representative for advice.

**4161 HPVA sample conversion failed. File [n] is version [n]. Conversion is currently possible for version 5 and greater.**

*Cause:* An attempt was made to convert an HPVA sample (.Hlsh file extension) into the MicroActive (.SMP file extension) sample format. The specified file is an early version of the HPVA data which is not yet supported by MicroActive.

*Action:* MicroActive cannot be used with this older format sample data. Contact a Particulate Systems representative for advice on how to analyze this data.

**4162 HPVA sample conversion failed. The adsorptive [n] could not be found in the fluids directory.**

*Cause:* An attempt was made to convert an HPVA sample (.Hlsh file extension) into the MicroActive (.SMP file extension) sample format. The specified analysis gas does not have a corresponding fluid file in the applications fluids directory. A NIST REFPROP fluid file (.FLD file extension) is required by MicroActive to obtain gas properties for HPVA samples

*Action:* Ensure that files in the fluids directory have not been removed or renamed. MicroActive can be reinstalled to restore the directory contents.

**4164 Unexpected I/O error accessing data for real time scan data in sample [n].**

*Cause:* A sample file for a running analysis could not be opened with exclusive write access.

*Action:* Ensure that no applications other than the analyzer application has access to the sample file during an analysis.

**4200 An error occurred while loading the application control information. Data entry cannot be performed. (Code [n]).**

*Cause:* An error occurred accessing the control information disk file required by this application.

*Action:* The disk drive may have failed or be corrupt. Run diagnostics on the disk drive.

**4400 The computer does not have the communications port specified for the SmartPrep(s). Cannot initialize.**

*Cause:* The communications port associated with this unit was not valid.

*Action:* Run the setup program and set up the unit on a valid port.

**4401 The communications port specified for the SmartPrep(s) is already in use. Cannot initialize.**

*Cause:* The communications port associated with this analyzer is in use by some other program in the system.

*Action:* Close the other program to release the port. Restart the analysis application.

**4402 The communications port specified for the SmartPrep(s) cannot be accessed. Cannot initialize.**

**4403 Cannot communicate with SmartPrep Unit [n].**

*Cause:* The communications port associated with this unit was not valid.

*Action:* Run the setup program and set up the unit on a valid port.

**4404 The application version of the SmartPrep Unit [n] is invalid.**

*Cause:* The controller application running on the designated analyzer is invalid.

*Action:* Use the SmartPrep setup program to download the proper controller application to the analyzer, or if unavailable, contact a Micromeritics Service Representative.

**4405 Fatal communications error with SmartPrep Units[n].**

*Cause:* There was a fatal error in the serial communications between the application and the SmartPrep Instrument Controller. All displays for that SmartPrep will be closed.

*Action:* Ensure that the SmartPrep is properly chained to the computer on the communications port configured in the *Setup* program. Stop and restart the application. Contact a Micromeritics Service Representative if this error message continues.

**4406 A maximum of [n] files may be selected.**

*Cause:* Too many files were selected for the SmartPrep start degas operation.

*Action:* Retry the operation with the proper number of files (1 per port).

**4407 Error searching for installed Smart VacPreps. The registry could not be read.**

*Cause:* The application was not installed properly.

*Action:* Reinstall the application. Contact a Micromeritics Service Representative if this error message continues.

**4408 The [n] in [n] already has Smart VacPrep S/N [n]. The Smart VacPrep must be removed from the [n] before it can be added.**

*Cause:* The Smart VacPrep was already installed for another application / unit.

*Action:* Remove the Smart VacPrep from the installed unit before adding it to the preferred unit.

**4409 A free IP address on the same subnet as [n] could not be found.**

*Cause:* All IP addresses on the network for the Ethernet card specified during installation are in use by other Micromeritics applications on this computer.

*Action A:* Uninstall unused Micromeritics applications.

*Action B:* Configure a different Ethernet card for use by the application using the application installer.

**4410 The .INI file could not be updated with configuration for Smart VacPrep S/N [n].**

*Cause:* The application .INI file is opened by another application and could not be updated.

*Action:* Close all open applications and add the Smart VacPrep again using the Smart VacPrep menu.

**4411 Error dosing.**

*Cause:* The backfill timed out.

*Action:* Ensure there is gas available and the pressure regulator is set to the appropriate



pressure. Also ensure that the gas supply regulator shutoff valve is open.

**4412 Error calibrating the servo.**

*Cause:* Calibration results are out of range.

*Action:* Follow standard calibration procedures and try again. Contact a Micromeritics Service Representative if this error message continues.

**4413 Error overheating on port [n]. Current = [n] [n], Target = [n] [n], Limit = [n] [n].**

*Cause:* The temperature of the indicated mantle exceeded the maximum allowed value.

*Action:* Ensure the power and thermocouple connectors for the mantle are properly installed. Contact a Micromeritics Service Representative if this error message continues.

**4414 Error thermocouple unplugged on port [n]. Target = [n] [n].**

*Cause:* The thermocouple is unplugged or has malfunctioned.

*Action:* Ensure the thermocouple is plugged in. Contact a Micromeritics Service Representative if this error message continues.

**4415 Degas transducer zero calibration failed. Current Offset = [n] counts, Current Pressure = [n] [n], New Offset = [n] counts, Nominal = [n] counts.**

*Cause:* The pressure transducer offset exceeds the recommended limit.

*Action:* Ensure that the vacuum pump is on. Repeat the pressure offset calibration. Contact a Micromeritics Service Representative if this error message continues.

**4416 Degas transducer scale calibration failed. Reference = [n] [n], Current = [n] [n], New Scale = [n] [n] count, Nominal = [n] [n] count.**

**4417 Degas vacuum gauge low point calibration failed. Reference = [n] [n], Current = [n] counts.**

*Cause:* The transducer offset calibration was rejected.

*Action:* Contact your Micromeritics Service Representative.

**4418 Degas vacuum gauge high point calibration failed. Reference = [n] [n], Current = [n] counts.**

*Cause:* The vacuum gauge calibration was rejected.

*Action:* Contact your Micromeritics Service Representative.

**4419 Error reading servo DAC.**

*Cause:* There is a problem with the servo DAC timing out.

*Action:* Contact your Micromeritics Service Representative.

**4420 Communications error.**

*Cause:* The application failed to connect to the Smart VacPrep.

*Action:* Ensure the unit is powered and properly connected to the network specified during installation. Check the power cable, power switch, and Ethernet cable, then reconnect to the Smart VacPrep either through the Smart VacPrep menu for this analyzer or by restarting the application. Contact a Micromeritics Service Representative if this error message continues

**4421 Smart VacPrep S/N [n] is busy and could not be removed.**

*Cause:* The Smart VacPrep cannot be removed because it is currently performing an operation.

*Action:* Wait until the Smart VacPrep completes the current operation and try again.

**4423 The sample [n] is already selected on port [n].**

*Cause:* The selected sample file is already selected for use on a different port.

*Action:* Select another sample file for this port.

**4424 The file [n] on port [n] could not be opened. Check if the sample file is already in use for editing or analysis.**

*Cause:* The selected sample file is already open by this or another application.

*Action A:* The selected sample file is damaged.

*Action B:* Select another sample file.

**4425 The sample [n] on port [n] has an invalid status and cannot be used for degassing.**

*Cause:* The status of the file is not consistent with the current operation.

*Action:* Select a sample file that has not been used for an analysis. Only sample files with a status of *No Analysis* or *Prepared* may be selected.

**4426 Port [n] is currently in use. Operation cannot be started.**

*Cause:* The current operation cannot be completed because the port is already in use.

*Action:* Wait for port to terminate operation or perform the desired operation on an unused port.

**4427 Smart VacPrep S/N [n] is already in use.**

*Cause:* The Smart VacPrep is configured for use by another Micromeritics application.

*Action:* Remove the specified Smart VacPrep from other Micromeritics applications before using it with this application.

**4428 Error no response on port [n]. Current = [n] [n], Target = [n] [n].**

*Cause:* The Smart VacPrep cannot be removed because it is currently performing an operation.

*Action:* Wait until the Smart VacPrep completes the current operation and try again.

**6100 Unable to establish the TCP connection with the instrument.**

*Cause A:* A communications problem between the computer and the analyzer has occurred.

*Action A:* Check the cable connection between the computer and the analyzer.

*Action B:* Go to **Unit [n] > Unit Configuration** and verify that the TCP/IP configuration for the computer and the analyzer are correct.

*Action C:* Exit the application and power off the analyzer, then power on the analyzer and restart the application. If the problem persists, contact your Micromeritics representative.

**6223 There is no Nitrogen attached to the unit.**

*Cause:* A calibration requiring nitrogen was attempted but the application does not recognize that nitrogen is attached.

*Action:* Ensure that a nitrogen gas cylinder is installed at one of the analysis ports, then go to **Unit > Unit configuration** and enter N2 for the appropriate valve.

**6226 An analysis cannot be started because all ports are currently in use.**

*Cause:* An attempt was made to start an analysis while all ports are in use.

*Action:* Wait until the analysis completes on a port, then another analysis can be started.

**6227 File [n] cannot be analyzed. It is currently being edited.**

*Cause:* An attempt was made to start an analysis using a sample file that is currently being edited.

*Action:* Close the edit session on the sample file, then the file can be used for analysis.

**6228 Analysis gas [n] in sample file does not match analysis gas [n] in other active samples.**

*Cause:* An attempt was made to start an analysis using a sample file that contains an analysis gas other than the gas currently being used. All current analyses must use the same analysis gas.

*Action A:* Change the gas in the sample file to use the current analysis gas.

*Action B:* Wait until the current analyses are complete, then run the sample.

**6229 This file already selected for the analysis.**

*Cause:* The selected sample file is already being used for an analysis.

*Action:* Select another sample file.

**6230 Dosing method does not match analysis type. Choose Start Krypton Analysis from the Unit menu or change the dosing method to Normal.**

*Cause:* There was an attempt to perform a nitrogen or nitrogen-like analysis with *From last port* selected as the dosing method.

*Action:* Change the *Dosing Method* to *Normal* in the *Adsorptive Properties* window, then start the analysis.

**6231 Dosing method does not match analysis type. Choose Start Analysis from the Unit menu or change the dosing method to From last sample port.**

*Cause:* An attempt was made to perform a Krypton analysis with *Normal* selected as the dosing method.

*Action:* Select *From last port* for *Dosing Method* in the *Adsorptive Properties* window, then start the analysis.

**6232 [n] gas in sample file does not match [n] gas in other active samples.**

*Cause:* An attempt was made to start an analysis using a sample file that contains a P<sub>0</sub> gas other than the P<sub>0</sub> gas currently being used. All current analyses must use the same P<sub>0</sub> gas.

*Action A:* Change the gas in the sample file to use the current P<sub>0</sub> gas.

*Action B:* Wait until the current analyses are complete, then run the sample.

**6236 An evacuation cannot be started because all analysis ports are currently in use.**

*Cause:* An attempt was made to evacuate one or more analysis ports while all ports are in use.

*Action:* Wait until the current operation completes to evacuate a port.

**6240 Leak test failed on port [n].**

*Cause:* With the sample port valve closed, the sample pressure increased by 0.15 mmHg before the leak test duration was completed.

*Action:* Check sample tube fitting and ensure that it is securely attached to the port, then restart the analysis.

**6247 Warm Freespace failure: P1 = [n], P2 = [n].**

**6248 Cold Freespace failure: P3 = [n].**

*Cause A:* Helium gas line is not properly connected to the analyzer.

*Action A:* Check the helium gas connections.

*Cause B:* A valve, transducer, or elevator has failed.

*Action B:* Contact your Micromeritics Service Representative if necessary.

**6249 Zeroing of a transducer failed. Analysis canceled.**

**6250 Matching of Sample port transducer failed. Analysis canceled.**

**6251 Matching of Psat port transducer failed. Analysis canceled.**

*Cause:* The transducer did not respond correctly.

*Action:* Contact your Micromeritics Service Representative.

**6264 Krypton gas is not condensing in sample port [n].**

*Cause A:* The krypton gas may be contaminated.

*Action A1:* Evacuate the krypton gas inlet line.

*Action A2:* Manually verify the saturation pressure of the krypton gas:

1. Evacuate the last port with an empty tube.
2. Backfill with krypton gas to 20 mmHg.

3. Raise the Dewar on the last port.

These steps should condense the krypton to a pressure below 3 mmHg.

*Cause B:* The Dewar on the last port does not contain enough cryogen.

*Action B:* Refill the Dewar.

**6267 Dose increments cannot be used with krypton analyses.**

*Cause:* Dose increments are not supported for krypton analyses.

*Action:* Select *Target Pressures* and enter a pressure table in the analysis conditions.

**6268 Dose increment [row number] [increment] is smaller than the minimum of [minimum increment]. Continue with the minimum increment?**

*Cause:* A requested dose increment is too small to be dosed accurately.

*Action A:* Click **Yes** to perform the analysis. The minimum increment will automatically be used in place of increments that are too small.

*Action B:* Click **No**. Increase the sizes of the increments.

*Action C:* Click **No**. Use more sample so that the requested increment per gram of sample amounts to an absolute increment that exceeds the minimum.

**6269 Analysis gas in sample file does not match any gas in the unit.**

**6270 Psat gas in sample file does not match any gas in the unit.**

**6271 Backfill gas in sample file does not match any gas in the unit.**

**6276 The backfill gas [Gas Name] does not match any gas in the unit.**

**6277 The free space gas [Gas Name] does not match any gas in the unit.**

*Cause:* A gas selected in the analysis is not connected to the instrument or not recognized by the instrument.

*Action A:* Select a different gas that is connected to the instrument in the sample file analysis, Psat, or backfill gas selections.

*Action B:* Connect the requested gas to the instrument, and use Unit[n] -> Unit configuration to select the gas connected to the inlets.

**6272 The entered [P0 or Psat] value (P0/Psat and Temperature Options of the Analysis Conditions) is outside the range of the pressures listed in the Psat vs. Temperature Table (Adsorptive Properties).**

**6273 The entered bath temperature value (P0/Psat and Temperature Options of the Analysis Conditions) is outside the range of the temperatures listed in the Psat**

**vs. Temperature Table (Adsorptive Properties).**

*Cause:* The entered P0 or T in the analysis conditions -> P0/Psat and T options are out of the range of the Psat vs. Temperature table (In the adsorption properties .ADP for the gas).

*Action A:* Enter a pressure or temperature that is within the Psat vs T table range in the P0/Psat and T options.

*Action B:* Create or request a Psat vs T table that extended the pressure or temperature range.

**6274 Invalid sample file - Adsorptive Properties ""Non-condensing adsorptive"" cannot be used unless Analysis Conditions ""Absolute pressure dosing"" is selected.**

*Cause:* Non-condensing adsorptive won't condense inside Psat tube, so the user need to use "Absolute pressure dosing" for the analysis.

*Action A:* Choose "Absolute pressure dosing" in the dosing options in analysis conditions.

*Action B:* Choose a gas that condenses under normal conditions for the analysis.

**6275 Too many pressure points from the pressure increments. Increase the pressure increment.**

*Cause:* User choose a large range and/or a small pressure increment that leads to over 5000 points to collect in the pressure table. We pose this limitation to avoid too much data being collected.

*Action:* Increase the pressure increments or choose a narrower pressure range to reduce the number of points to collect.

**6278 The free space gas file [gas file name] could not be opened.**

*Cause:* The selected gas' .ADP file cannot be opened by the software.

*Action:* Click **File > Open** and select adsorption file of the gas. If the ADP file is broken, contact Micromeritics for a new .ADP for the gas.

**6280 Large sample cell mode is active. Please confirm that a large 31mm OD tube is attached to the port and that the sample is not a powder. Initiating this analysis without confirmation of the above conditions may result in unsafe conditions or serious damage to the instrument.**

*Cause:* The large sample cell mode is turned on. This mode is designed specifically for large dose quantities using a 31mm OD tube.

*Action A:* Go to the installation data folder, open the 2460.ini file, remove the line “LargeSampleCell=1” or set it to “LargeSampleCell=0”.

*Action B:* If the user is fully aware of what this mode is for, click **Yes** to proceed. User should work with the Micromeritics application team to make sure that they are using this mode correctly.

**6510 Main pressure transducer overrange detected.**

**6511 Sample transducer [n] overrange detected.**

**6512 Po transducer [n] overrange detected.**

**6513 Hardware pressure overrange detected.**

*Cause:* A manifold pressure over 1000 mmHg was detected by the hardware.

*Action:* Observe caution when operating the analyzer manually. Contact a Micromeritics Service Representative if this error message continues.

**6520 Power failure detected. The sample is in an unknown condition. A run termination will be performed for safety.**

*Cause:* A total power failure occurred while an analysis was in progress.

*Action:* Allow the analysis to terminate.

**6521 Time limit exceeded while dosing manifold to [n] with [n].**

*Cause A:* The maximum time was exceeded before the target pressure point was reached. The nitrogen regulator may be set too low or turned off.

*Action A:* Set the analysis gas regulator to 15 psig (1.0 bar). Then resume the analysis.

*Cause B:* The analysis gas cylinder is empty.

*Action B:* Connect a new analysis gas cylinder, then resume the analysis.

**6525 Time limit exceeded while backfilling manifold to [n] with [gas].**

*Cause A:* The maximum time was exceeded before the target pressure point was reached. The backfill gas regulator may be set too low or turned off.

*Action A:* Set the backfill gas regulator to 15 psig (1.03 bar), then resume the analysis.

*Cause B:* The gas cylinder is empty.

*Action B:* Connect a new gas cylinder, then resume the analysis.