

AUTOCHEM[®] III

AUTOMATED CATALYST CHARACTERIZATION SYSTEM



ERROR MESSAGES

May 2025

CORPORATE PROFILE

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.

PATENTS

For patent information, visit www.Micromeritics.com/patents.

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ERROR MESSAGES

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.

2031 The number of rows or columns has exceeded the maximum. Data will be truncated.

Cause: The exported data was truncated because it exceeded the maximum number of rows or columns that the XLS file format allows (65,535).

Action: Export to the TXT file format, then paste the data from the text file into an XLSX spreadsheet.

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 Micromeritics 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 cor-**

rect.

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 pro-

gram 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 requested.

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.

4601 File [n] is not a mass spectrometer data file.

Cause: The selected file does not contain mass spectrometer data in a supported format.

Action: Export the data using the analysis application for the mass spectrometer to a supported text format then import the file into the Micromeritics application.

4602 The file does not contain any mass spectrometer data or is missing required fields. Nothing was imported.

Cause: The selected file does not contain mass spectrometer data.

Action: When exporting the data using the analysis application for the mass spectrometer, ensure that the signals of interest are selected for export. Export the data to a supported text format then import the file into the Micromeritics application.

4603 This instrument has no TCD calibration files to edit.

Cause: No TCD calibrations associated with this analyzer were found.

Action: Go to **Unit [n] > TCD Calibration** to create a new TCD calibrations for this analyzer.

4604 This sample does not contain an experiment which can be used in a [n] calibration.

Cause: The sample file selected in the calibration editor does not have valid peaks for the type of calibration.

Action: Select a sample file that contains the appropriate experiment type.

4605 The calibration data for experiment [n] may already be loaded. You may delete duplicates after loading.

Cause: Before reloading the peak information for a sample file into the calibration editor, all previously loaded peaks must first be deleted.

Action: Delete all peaks from the calibration editor, then try loading the sample file again.

4606 The file [n] was not created with this instrument or does not contain calibration data.

Cause: The selected sample file contains data collected on an analyzer different from the analyzer associated with the current calibration editor.

Action: Select a sample file containing calibration data collected on the current analyzer.

4607 The calibration data file [n] was not created from an imported mass spec file.

Cause: The selected sample file does not contain mass spectrometer data.

Action: Select a sample file containing mass spectrometer calibration data collected.

4608 Unable to update the adsorptive property file. Ensure that the selected adsorptive is not opened for editing.

Cause: The selected adsorptive property file could not be written.

Action: Ensure that the adsorptive property file for the gas selected in the gas flow constant calibration wizard is not currently open in an adsorptive property editor.

4609 Unexpected I/O error accessing data for an experiment 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.

4610 Cannot append to an experiment in sample [n]. Maximum size may be exceeded.

Cause: Collected data could not be written to a sample file for a running analysis. This may be due to the maximum allowed file size for the operating system.

Action: Reduce the amount of data collected during analysis by reducing the data collection rate or reducing the number of experiments in the analysis conditions task list.

4611 At least two peaks are required to determine first order kinetics.

Cause: An experiment selected in this report contains less than the two peaks required by the report.

Action: Identify the peaks in the experiment before reporting or deselect the experiment in the report options before generating the report.

4612 Ambient temperature should be > 10 °C.

Cause: An experiment selected in this report contains an entered ambient temperature for below the minimum allowed for the report.

Action: Correct the ambient temperature in the experiment using the calibration selection editor that is accessed through the experiment peak editor.

4613 Average syringe area should be > 0.

Cause: There is no peak data for the loop calibration.

Action: Identify the injection peaks by creating baselines for these peaks in the experiment peak editor.

4614 At least 6 peaks are required for a loop calibration; the peak table contains [n].

Cause: The number of peaks for the loop calibration is less than six.

Action: Using the experiment peak editor, create baselines for the injection peaks. There must be at least six injections and corresponding peaks to calculate the loop volume.

4615 No experiments were selected for inclusion in this report.

Cause: All experiments were deselected for this report.

Action: Select the experiments to report in the selected experiments list in the report options for this report.

4616 At least two experiments are needed for this report.

Cause: The report options for this report do not include the selection of at least two experiments.

Action: Select at least two experiments to report in the selected experiments list in the report options for this report.

4617 The data requested on this report are not available.

Cause: The data required for this report, such as the identified peaks, are not contained within any of the selected experiments.

Action A: Use the experiment peak editor to create baselines for the experiment peaks.

Action B: Ensure that only experiments containing data for the configured report are selected in the selected experiments list in the report options for this report.

Action C: Ensure that only data contained within the experiment is selected for reporting in

the report options for this report.

4618 There are no peaks available for this experiment.

Cause: There are no identified peaks within one or more selected experiments for this report.

Action: Use the experiment peak editor to create baselines for the experiment peaks.

4619 TCD calibration is required for the calculations of this report.

Cause: A TCD calibration has not been applied to one or more selected experiments for this report.

Action: Select a TCD calibration for the selected experiments using the calibration selection editor that is accessed through the experiment peak editor.

4620 [n] does not contain concentration data.

Cause: A TCD calibration has not been applied to one or more selected experiments for this report.

Action: Select a TCD calibration for the selected experiments using the calibration selection editor that is accessed through the experiment peak editor.

4621 New steps cannot be inserted in the synopsis at any point that precedes the step that is currently being executed.

Cause: The analysis has already progressed past the point at which an attempt was made to insert a step; therefore the step would not be performed.

Action: Insert the new analysis step after the step or repeat loop that is currently being executed.

4622 No new steps may be inserted. Analysis is complete.

Cause: The analysis for this sample file has completed. A step cannot be inserted into a sample file whose analysis is complete.

Action: Create a new sample file and then click **Replace** to copy the analysis conditions from the completed file, then add the step to the new sample file.

4623 Warning: For the chosen total flow rate and blending proportions, the carrier and/or loop MFC will be set to a flow rate less than 10 cm³/min. Blending performance may not be acceptable. Do you wish to keep these settings?

Cause: A request for the blending of the carrier and loop gases was made, but the proportions of the gasses and the flow rate of the mixture chosen caused at least one of the MFCs to be set to a rate less than 10 cm³/min. The accuracy of the MFC at such low flow rates may be unacceptable for some applications.

Action: Click **Yes** if reduced accuracy is acceptable or click **No** and change the proportions or total flow rate.

4624 [n] has calibrations applied and cannot be used to construct new calibrations until the applied calibrations are removed.

Cause: Attempting to create a signal calibration with data that has already been calibrated.

Action A: Remove the applied calibration in the peak editor so that the signal may be used to generate a new signal calibration.

Action B: Select a file that does not already have calibration applied.

4625 No active metal with a percent of sample mass greater than zero was found.

Cause: The metal table for the sample does not contain an active metal with a non-zero percent of sample, which is required by the pulse chemisorption report.

Action: Open the sample description tab and click **Active Metals** to open the metal table editor. Set a percent of sample mass for one or more metals and run the report again.

4626 Selecting sample files with data collected by different instruments is not allowed. Only the first sample file (S/N: [n]) will be loaded.

Cause: Sample files from different instruments were selected as sources for a signal calibration. Signal calibrations are only valid when constructed from analyses with a single instrument.

Action: Select sample files with analyses performed on the same instrument when constructing a signal calibration from multiple sample files.

4627 No valid sample files were selected.

Cause: A signal calibration could not be constructed due to the selection of incompatible sample files.

Action: Construct signal calibrations using sample files collected on the same instrument with the same analysis experiment types.

4629 [n] interpolated data is too large.

Cause: Interpolation of data between record blocks exceeds the available memory.

Action: Retake the data with shorter time intervals between end and start record script steps.

4631 An adsorptive properties file is needed for [n].

Cause: Vapor pressure cannot be calculated because there is no adsorptive properties file for the specified vapor.

Action: Ensure that the adsorptive properties library includes the folder with .ADP files.

4632 Vapor pressure cannot be calculated for [n] at [n].

Cause: The reflux temperature is outside the range of temperatures for which vapor pressure can be calculated.

Action A: Ensure that the reflux temperature in the analysis conditions is appropriate for the selected vapor.

Action B: If using the Anoine equation, check that the minimum and maximum temperatures are set correctly.

4633 Step [n]. Vapor is not supported by this model.

Cause: The indicated experiment step was set to use vapor flow/pulse type analysis, which is not supported by the current model selection. Go to *View conditions* for [model].

Action: Change the model selection back to *AutoChem III (2930)* and change the analysis type in the indicated experiment step to one supported by the preferred model before changing back.

4634 Step [n]. Preparation gas must be set to None.

Cause: Attempting to change the model selection to one that corresponds to an instrument which does not have the preparation MFC hardware. The indicated step sets a preparation gas. Go to *View conditions* for [model].

Action: Change the model selection back to *AutoChem III (2930)* and change the preparation gas selection to *none* before changing back.

4635 Step [n]. Blend port 2 and blend port 3 are not supported by this model.

Cause: Attempting to change the model selection to one that corresponds to an instrument which does not have the multiple analysis ports (only Port 1). The indicated step is attempting to set parameters on Port 2 and/or Port 3. Go to *View conditions* for [model].

Action: Change the model selection back to *AutoChem HT (2830)* and change the Port selection to *Port 1*, deselect controls specific to Port 2/3, or delete the step if it will not be required before changing back.

4636 Step [n]. Physisorption experiments are not supported by this model.

Cause: The indicated experiment step was set to use physisorption type analysis, which is not supported by the current model selection. Go to *View conditions* for [model].

Action: : Change the model selection to either *AutoChem III (2930)* or *MicroChem (2730)* and change the analysis type in the indicated experiment step to one supported by the desired model before changing back.

4637 Step [n]. Hardware for preparation MFC not supported by this model. AutoChem III only.

4637 Step [n]. Hardware for reference MFC not supported by this model. AutoChem III and AutoChem HT only.

4637 Step [n]. Hardware for carrier port 2 and port 3 MFCs not supported by this model. AutoChem HT only.

Cause: The step indicated is attempting to Zero measurements from MFC hardware that is not present on the selected model. Go to *View conditions* for [model].

Action A: Change the model selection to the supporting instrument type (indicated in the message) and modify the step settings so that they do not conflict with the preferred model hardware, then change the selection back to confirm the error has been cleared.

Action B: Delete the indicated step and insert a new one with the selections appropriate for the model hardware.

4638 Signal calibration directory could not be created for [n]. Analyses cannot be performed.

Cause: The unit calibration directory could not be created.

Action: Confirm that the current user profile has permissions for editing the hardware directory contents. Restart the software and/or try reinstalling the software such that the current user has access. If error persists contact your micromeritics representative.

4639 Interval [n] is not defined in the breakthrough editor.

Cause: A breakthrough interval was selected for a plot report, but the specified interval is not present.

Action A: Add intervals in the breakthrough editor.

Action B: Select a different editor or deselect *show interval* in the plot report editor.

4641 The mass spectrometer temperature data was clipped to the experiment range.

Cause: A request was sent to use the TCD temperature data with the imported mass spectrometer data, but the imported mass spectrometer signal has a longer time range than the TCD signal, so it will use the endpoint temperature for the remaining time.

Action: Ensure the imported mass spectrometer data is appropriate for the experiment.

6000 The instrument [n] is not calibrated.

Cause: The application is in the process of initializing the instrument 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.

6001 Step [n]. [n] flow is not supported by the instrument. The gas selection must be <None> or the flow rate must be 0.

Cause: The specified step configures a gas flow with a non-zero flow rate on the specified mass flow controller, but the specified mass flow controller does not exist on this instrument.

Action A: Open the analysis conditions for the sample file. Ensure that the selected model in the *View conditions for* list matches the instrument model. Replace the specified step with a properly configured step.

Action B: Open the analysis conditions for the sample file. Set the selected model in the *View conditions for* list to 2930. Open the specified step, and set the flow rate to 0 and the gas to *None* for the specified mass flow controller. Set the selected model in the *View conditions for* list to the appropriate model, and save the file.

6002 Step [n]. [n] is not connected to the [n] inlet.

Cause: An unconfigured gas is selected for use by the specified mass flow controller.

Action: If the gas is connected to the analyzer, go to **Unit [n] > Gas Connections** and add the gas to the gas selections. If the gas is not connected to the analyzer, either connect the gas and add the gas to the gas selections in the gas connections or change the gas selected for use by the specified mass flow controller for this step

6003 Step [n]. An adsorptive properties file is needed for [n].

Cause: There is no *Adsorptive Properties* file for the specified gas available to the application.

Action: An *Adsorptive Properties* file for the gas may have been installed with the application but was deleted. Either re-install the application, or create an *Adsorptive Properties* file for the gas.

6004 Step [n]. Flow of an inert gas for a minimum of 10 minutes is required between hydrogen and oxygen flows from the same inlet manifold.

Cause: The specified step will result in the presence of both oxygen and hydrogen in the inlet manifold.

Action: Insert an *Instrument Settings* step before the specified step and select an inert gas for the mass flow controller of concern. Then, insert a *Wait* step of at least 10 minutes. This will purge the flow path before the introduction of the incompatible gas.

6005 Step [n]. This step requires a [n] gas.

Cause: A required gas is set to *None*.

Action: Edit the selected step in the analysis conditions for the sample file, and select a valid gas.

6006 Step [n]. This step requires a positive [n] gas flow rate.

Cause: A required gas flow rate is set to zero.

Action: Edit the selected step in the analysis conditions for the sample file, and select a valid gas flow rate.

6007 Step [n]. [n] flow rate [n] exceeds [n], the maximum for the [n] MFC.

Cause: The specified flow rate exceeds the maximum flow rate allowed by the mass flow controller.

Action: Edit the selected step in the analysis conditions for the sample file, and select a valid gas flow rate

6008 Step [n]. A CryoCooler is required for analysis temperatures less than 0 °C. At least one sample must be selected to proceed.

Cause: A subambient sample temperature is configured, but an attached CryoCooler is not detected.

Action A: Attach the CryoCooler, then restart the analysis.

Action B: Edit the selected step in the analysis conditions for the sample file, and select a valid sample temperature.

6009 Step [n]. A sub-ambient cooler is required for analysis temperatures less than 20.0 °C.

Cause: A sample temperature is configured below the minimum furnace temperature, but an attached sub-ambient cooler is not detected.

Action A: Attach the sub-ambient cooler, then restart the analysis.

Action B: Edit the selected step in the analysis conditions for the sample file, and select a valid sample temperature.

6010 Step [n]. Gas calibrations are not supported by this instrument. A blend valve is required.

6010 Step [n]. Loop calibrations are not supported by this instrument.

6010 Step [n]. Vapor calibrations are not supported by this instrument.

Cause: A calibration is configured, but a required hardware option has not been detected.

Action A: Open the analysis conditions for the sample file, and remove the specified calibration step.

Action B: If the required hardware is expected to be present, contact your Micromeritics Service Representative.

6011 Step [n]. Gas calibrations with blended gases are not supported by this instrument. Pure gases must be selected.

Cause: A gas mixture has been selected in a gas calibration step.

Action: Edit the specified gas calibration step, and change the selected gas to a pure gas.

6013 Step [n]. The loop valve is not present. The loop valve position must be *fill*.

6013 Step [n]. The blend valve is not present. The loop valve position must be *bypass*.

6013 Step [n]. The vapor valve is not present. The loop valve position must be *bypass*.

Cause A: A rotary valve is set to an active position, but the required hardware option has not been detected.

Action A: Open the analysis conditions for the sample file. Set the selected model in the *View*

conditions for list to 2930. Open the specified step, and set the specified rotary valve to the specified inactive position. Set the selected model in the *View conditions for* list to the appropriate model, and save the file.

Action B: If the required hardware is expected to be present, contact your Micromeritics Service Representative.

6014 Step [n]. The blend valve position is not supported by the instrument.

Cause: The 2830 blend valve is set to an active position, but the instrument is not a 2830.

Action: Open the analysis conditions for the sample file. Set the selected model in the *View conditions for* list to 2830. Open the specified instrument settings step, and set the blend valve position to *Loop*. Set the selected model in the *View conditions for* list to the appropriate model, and save the file.

6015 Step [n]. The flask heater must be connected for vapor operations.

Cause: A connected vapor mantle was not detected. The vapor mantle must be connected and in place if the vapor rotary valve will be set to the active position.

Action A: Connect the vapor mantle prior to an analysis containing a vapor flow.

Action B: Edit the specified step, and set the vapor rotary valve position to *Bypass*.

6016 Step [n]. Sorption trap regeneration is not supported by this instrument.

Cause: A trap regeneration step is configured, but the sorption trap option has not been detected.

Action A: Remove the trap regeneration step from the analysis conditions.

Action B: If the required hardware is expected to be present, contact your Micromeritics Service Representative.

6017 Step [n]. The sorption trap heater must be connected for trap regeneration.

Cause: A connected sorption trap mantle was not detected. The sorption trap mantle must be connected and in place if the analysis conditions contain a trap regeneration step.

Action A: Connect the sorption trap mantle prior to starting an analysis containing a trap regeneration step.

Action B: Remove the trap regeneration step from the analysis conditions.

6018 Step [n]. A carrier gas must be selected and flowing at least 10 sccm while the detector is on.

6018 Step [n]. A reference gas must be flowing at least 10 sccm while the detector is on.

Cause: While the detector is enabled, a gas flow of at least 10 sccm is required to prevent damage to the detector.

Action: Edit the specified step, and set the gas flow rate for the specified gas to at least 10 sccm.

6019 Step [n]. Loop gas flow is required for loop injections.

Cause: A loop injection is configured, but either the loop gas is set to *None* or the loop gas flow rate is zero.

Action: Edit the specified step, and ensure that both a valid loop gas and gas flow rate are selected.

6020 Step [n]. An injection gas must be specified for manual injections.

Cause: A manual injection is configured, but the gas is set to *None*.

Action: Insert an instrument settings step prior to the specified dose step. Select the manual injection gas as the loop gas.

6021 Step [n]. The detector must be turned on before the start of data recording.

Cause: A *Recording* step is configured to run, but the detector is not enabled.

Action: Insert an *Instrument Settings* step or modify an instrument settings step prior to the recording step, and enable the detector.

6022 [n] is not known to the [n] mass flow controller.

Cause: An unconfigured gas is selected for use by the specified mass flow controller.

Action: If the gas is connected to the instrument, go to **Unit [n] > Gas Connections** and add the gas to the gas selections. If the gas is not connected to the instrument, either connect the gas and add the gas to the gas selections in the gas connections or change the gas selected for use by the specified mass flow controller for this step

6023 Adsorptive properties for [n] were not found in the adsorptive properties library.

Cause: There is no *Adsorptive Properties* file for the specified gas available to the application

Action: An *Adsorptive Properties* file for the gas may have been installed with the applic-

ation but was deleted. Either re-install the application, or create an *Adsorptive Properties* file for the gas.

6024 Invalid instrument model [n].

Cause: The instrument model number in the application .ini file does not match a supported model number.

Action A: Uninstall the application then use the *Setup* program to re-install the application and enter the model and serial for the attached instruments.

Action B: Use the *Setup* program to remove the instrument from the application configuration, then use the *Setup* program to add the instrument to the application configuration.

6025 Model selected in the analysis conditions [n] does not match the analysis instrument [n].

Cause: The instrument model selected in the analysis conditions does not match the analysis instrument.

Action: Open the analysis conditions for the sample file. Set the selected model in the *View conditions for* list to match the instrument model

6026 Maximum active gas concentration [n] exceeds the active gas percentage in Gas Connections setting [n].

Cause: The maximum active gas concentration specified in the *Gas Calibration* step exceeds the active gas concentration for the connected gas.

Action A: Reduce the maximum active gas concentration in the *Gas Calibration* step to a valid value given the active gas concentration of the configured gas.

Action B: Go to **Unit [n] > Gas Connections**. Ensure that the active gas concentration of the connected gas is correct.

6027 This analysis exceeds the maximum allowed length.

Cause: The number of steps in the analysis conditions exceeds the maximum allowed length.

Action: Reduce the number of steps in the analysis conditions.

6028 Maximum active gas concentration [n] exceeds what is achievable with Reference flow rate.

Cause: The maximum active gas concentration specified in the *Gas Calibration* step

exceeds what is achievable with the current Reference flow rate

Action A: Reduce the maximum active gas concentration in the *Gas Calibration* step to a valid value given the selected Reference flow rate.

Action B: Reduce the Reference flow rate to a value that allows a higher concentration of active gas.

10409 [n] mass flow controller set gas error detected. Expected gas: [n], not recognized.

Cause: This message indicates an attempt was made to use a gas for which the mass flow controller has not been programmed.

Action: Verify the gas mnemonic specified is supported by the AutoChem. If it is, contact your Micromeritics Service Representative about replacement of the mass flow controller.

10412 [n] mass flow controller communications error detected.

Cause: There is a problem with the specified mass flow controller communication.

Action: Contact your Micromeritics Service Representative.

10414 [n]: Rotary valve move error detected. Expected position: [n], Actual position: [n].

10415 [n]: Rotary valve initialization error detected. Number of ports: [n] expected [n].

Cause: A rotary valve command did not complete successfully.

Action: Contact your Micromeritics Service Representative.

10416 [n]: Rotary valve communications error detected.

Cause: There is a problem with the specified rotary valve communication.

Action: Contact your Micromeritics Service Representative.

10417 [n]: Rotary valve actuation specified, valve is not present.

Cause: A rotary valve command was given to a rotary valve that is not detected as installed.

Action: Contact your Micromeritics Service Representative.

10418 Time limit exceeded while waiting for baseline stable (elapsed: [n] s, slope: [n])

%/min, threshold: [n] %/min, remaining duration [n] s).

10419 Time limit exceeded while waiting for baseline return (elapsed: [n] s, change: [n] %/min², threshold: [n] %/min², remaining duration [n] s).

Cause A: The signal did not meet the specified threshold for baseline stability within the specified time period.

Cause B: The signal did not meet the specified threshold for a return to baseline within the specified time period.

Action: A number of factors affect the thermal conductivity detector baseline including effectiveness of the cold or sorption traps, the sample under analysis, flow rate and temperature stability, gas contamination, as well as the condition of the detector. Verify that the installed trap is properly prepared. Check for leaks in the gas flow paths. Verify stable operation of the mass flow controllers, temperature sensors and temperature control. If the problem persists, the thermal conductivity detector filaments may be contaminated or need to be replaced. Contact your Micromeritics Service Representative.

10420 [n] over-pressure detected (pressure: [n], maximum allowed: [n]).

Cause A: A pressure greater than the specified maximum was detected in the analyzer. The analyzer has automatically canceled any operations in progress and taken action to relieve the pressure.

Action A: If the analyzer was being operated manually, review recent activity to identify the cause of the overpressure and avoid a repetition. Contact your Micromeritics Service Representative if this error message continues.

Cause B: If the error occurred when the Dewar was lowered, excessive adsorption of condensation of gas may have occurred during analysis and returned to gas phase too rapidly when the Dewar was lowered.

Action B: Revise the analysis conditions or sample quantity to prevent recurrence. Contact your Micromeritics Service Representative if this error message continues.

Cause C: If the error occurred during dosing from a gas inlet, the gas inlet pressure might be excessive.

Action C: Adjust the gas inlet pressure to recommended range. Contact your Micromeritics Service Representative if this error message continues.

10421 Waiting longer than expected for temperature stability ([n], [n] s). Skip this step to continue the analysis. Analysis will be automatically cancelled in [n] minutes. Target=[n], Tolerance=[n], Max rate=[n]/min, Current temperature=[n], Current rate=[n]/min.

Cause: The temperature is taking an unusually long time to stabilize.

Action: If the specified temperature and rate of change are in an acceptable range for your analysis, skip the step. Otherwise, continue waiting for stability. Contact your Micromeritics Service Representative if this error message continues.

10422 The thermal conductivity detector was enabled without a minimum of [n]/min gas flow for [n] minutes. The detector has been disabled.

Cause: While the TCD is enabled, a minimum reference and analysis (carrier, or carrier + loop if blending) flow rate is required.

Action: Do not enable the TCD without reference and analysis (carrier, or carrier + loop if blending) gas flow at the minimum specified rate. Do not disable reference or analysis gas flow while the TCD is enabled.

10431 An invalid dynamic chemisorption script step was encountered. (step: [n], offset in script: [n], type: [n], size: [n])

10432 A dynamic chemisorption script experiment was ended during recording. (step: [n], offset in script: [n], type: [n], size: [n])

10433 A dynamic chemisorption script experiment was ended during repeat. (step: [n], offset in script: [n], type: [n], size: [n])

10434 A dynamic chemisorption script step had the wrong experiment or step number. (step: [n], offset in script: [n], type: [n], script step: [n])

10435 A dynamic chemisorption script record step was encountered during recording. (step: [n], offset in script: [n], type: [n], size: [n])

Cause: An error was detected in the analysis conditions for the currently running sample.

Action: Contact your Micromeritics Service Representative.

10436 The maximum number of dynamic chemisorption recording segments was exceeded. (step: [n], type: [n], segments: [n])

Cause: Data has exceeded the maximum limit for an analysis.

Action: Reduce the amount of data collected during analysis by reducing the data collection rate, reducing the length of data collection, or moving multiple experiments in a single analysis to single experiments in multiple analyses.

10437 A dynamic chemisorption script end record step was encountered while not recording. (step: [n], offset in script: [n], type: [n], size: [n])

10438 A dynamic chemisorption script repeat step was encountered during repeat. (step: [n], offset in script: [n], type: [n], size: [n])

- 10439** A dynamic chemisorption script end repeat step was encountered while not repeating. (step: [n], offset in script: [n], type: [n], size: [n])
Cause: An error was detected in the analysis conditions for the currently running sample.
Action: Contact your Micromeritics Service Representative.
- 10441** The maximum number of dynamic chemisorption recording marked events was exceeded. (step: [n], type: [n], events: [n])
- 10442** The maximum number of dynamic chemisorption recording peaks was exceeded. (step: [n], repeats: [n], peaks: [n])
Cause: Data has exceeded the maximum limit for an analysis.
Action: Reduce the amount of data collected during analysis by reducing the data collection rate, reducing the length of data collection, or moving multiple experiments in a single analysis to single experiments in multiple analyses.
- 10710** Furnace temperature error detected (sample: [n], furnace: [n], max allowed: [n], target: [n], power: [n]).
Cause: An error was detected with the furnace temperature.
Action: Contact your Micromeritics Service Representative.
- 10715** [n] temperature unresponsive to heating, changed [n] in [n] minutes (temperature: [n], target: [n], power: [n]).
Cause: The temperature is not responding to changes in the temperature target.
Action: Contact your Micromeritics Service Representative.
- 10730** [n] heater temperature error detected (temperature: [n], max allowed: [n], target: [n], power: [n]).
Cause: An error was detected with a heater temperature.
Action: Contact your Micromeritics Service Representative.
- 10735** Furnace temperature unresponsive to heating, changed [n] in [n] minutes (sample: [n], furnace: [n], target: [n], power: [n]).
Cause: The furnace temperature is not responding to changes in the temperature target.
Action: Contact your Micromeritics Service Representative.

10740 Furnace open during heating (sample: [n], furnace: [n], target: [n], power: [n]).

Cause: The furnace is not closed and latched.

Action: Close and latch the furnace after it has returned to ambient temperature. Contact your Micromeritics Service Representative if this error message continues.

10743 Sample temperature control error (actual: [n], scheduled: [n], furnace: [n], target: [n], rate: [n]/min, power: [n]).

Cause: While ramping the furnace temperature, the difference between the actual and expected temperature exceeded the maximum temperature delta allowed.

Action: Contact your Micromeritics Service Representative.

10747 Furnace temperature more than [n] different from sample temperature (furnace: [n], sample: [n], target: [n], rate: [n]/min, power: [n]).

Cause: While controlling the furnace temperature, the difference between the furnace and sample temperatures exceeded the maximum temperature delta allowed.

Action: Contact your Micromeritics Service Representative.

10753 [n] mass flow rate is out of tolerance. Gas: [n], target: [n]/min, actual: [n]/min, minimum: [n]/min, maximum: [n]/min.

Cause: During analysis, the difference between the actual and expected flow rates exceeded the flow rate tolerance.

Action: Check the gas regulator for proper inlet gas pressure as specified in the analyzer Operator Manual. Contact your Micromeritics Service Representative.

10945 The instrument was restarted while an analysis was in progress.

Cause: The analyzer restarted due to a power failure or an analyzer error.

Action: If power to the analyzer was cycled by the operator or by an electrical outage, allow the analysis to complete the automatic termination and repeat the analysis. If the analyzer restarted under normal operating conditions, contact your Micromeritics Service Representative.

10950 Power supply voltage error detected (type: [n], voltage: [n] volts, nominal: [n] volts).

Cause: There is a problem with the power supply voltage.

Action: Contact your Micromeritics Service Representative.

10980 **Line frequency out of tolerance (Frequency: [n] Hz, Minimum: [n] Hz, Maximum: [n] Hz).**

Cause: A problem was detected in the power supplied to the analyzer.

Action: Contact your Micromeritics Service Representative.

10990 **Pneumatic pressure out of tolerance (Pressure: [n] psig, Minimum: [n] psig, Maximum: [n] psig).**

Cause: A problem was detected in the compressed air supply used by the pneumatically actuated, hard seal valves and the furnace.

Action: Consult the Pre-Installation Instructions and Checklist for the compressed air supply pressure required for proper operation of the analyzer.

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