MICROACTIVE ASAP 2460

ACCELERATED SURFACE AREA AND POROSIMETRY SYSTEM

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Effective Solutions for
Material Characterization

ERROR MESSAGES

Dec 2019

CORPORATE PROFILE

Micromeritics Instrument Corporation is a leading global provider of solutions for material characterization with best-in-class instrumentation and application expertise in five core areas: density; surface area and porosity; particle size and shape; powder characterization; and catalyst characterization and process development. Founded in 1962, the company is headquartered in Norcross, Georgia, USA and has more than 300 employees worldwide. With a fully integrated operation that extends from a world class scientific knowledge base through to in-house manufacture, Micromeritics delivers an extensive range of high-performance products for academic research and industrial problem-solving. The implementation of tactical partnerships to incubate and deliver valuable new technologies exemplifies the company's holistic, customer-centric approach which extends to a cost-efficient contract testing laboratory – the Particle Testing Authority (PTA). The strategic acquisitions of Freeman Technology Ltd and Process Integral Development S.L. (PID Eng & Tech) reflect an ongoing commitment to optimized, integrated solutions in the industrially vital areas of powders and catalysis.

Freeman Technology (Tewkesbury, UK) brings market-leading powder characterization technology to Micromeritics' existing portfolio of particle characterization techniques. The result is a suite of products that directly supports efforts to understand and engineer particle properties to meet powder performance targets. With over 15 years of experience in powder testing, Freeman Technology specializes in systems for measuring the flow properties of powders. In combination with detailed application know-how these systems deliver unrivalled insight into powder behavior supporting development, formulation, scale-up, processing and manufacture across a wide range of industrial sectors.

PID Eng & Tech (Madrid, Spain) complements Micromeritics' renowned offering for catalyst characterization with technology for the measurement and optimization of catalytic activity, with a product range that extends to both standard and bespoke pilot scale equipment. Launched in 2003, PID Eng & Tech is a leading provider of automated, modular microreactor systems for the detailed investigation of reaction kinetics and yield. These products are supported by a highly skilled multidisciplinary team of engineers with in-depth expertise in the design, construction and operation of laboratory units and process scale-up.

The Particle Testing Authority (PTA) provides material characterization services for fine powders and solid materials using Micromeritics' instrumentation alongside complementary solutions from other vendors. With the certification and expertise to operate across a wide range of industries the PTA offering runs from single sample analysis to complex method development, method validation, new product assessment, and the analytical support required for large scale manufacturing projects. An experienced, highly trained team of scientists, engineers, and lab technicians works closely with every client to ensure that all analytical requirements are rapidly and responsively addressed.

Micromeritics has a strong global network with offices across the Americas, Asia, and Europe complemented by a dedicated team of distributors in additional locations. This ensures that local, knowledgeable support is available for every customer, in academia or industry. Micromeritics works across a truly diverse range of industries from oil processing, petrochemicals and catalysts, to food and pharmaceuticals, and at the forefront of characterization technology for next generation materials such as graphene, metal-organic-frameworks, nanocatalysts, and zeolites. Engineering solutions that work optimally for every user is a defining characteristic of the company.

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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.

2401   FATAL ERROR.

Cause: An internal processing and/or hardware error has occurred during communication with the analyzer.

Action: Contact your Micromeritics Service Representative.

2430   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.

2431   Error writing file [*n*], error code = [*n*].

Cause A: User logged onto a computer that does not have Write permissions.

Action A: Contact your IT department to change user permissions.

Cause B: Insufficient hard disk space to perform the operation.

Action B: Copy files not used regularly to an external media. Delete them from the hard disk, and then try the operation again.

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 inform-

ation?

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 wrong [*n*] of data, expected [*n*] bytes.**

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

Action: Contact your Micromeritics Service Representative.

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.

2438 **Disk drive [*n*] is inaccessible.**

2439 **Could not register file.**

2440 **Subset not found.**

2441 **Seek within file failed.**

2442 **Bad header in subset file.**

2443 **Subset owner denied access.**

2444 **Not a valid file format.**

2445 **Subset wrote the wrong amount of data.**

2446 **Error reading data.**

2447 **Error writing data.**

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

Action: Contact your Micromeritics Service Representative.

2448 **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.

2450 **Sample Defaults may not be edited while this operation is in progress. Do you wish to save and close the Sample Defaults edit session?**

Cause: An automatic analysis (an analysis in which sample files are created using the defaults) was processing while editing the defaults.

Action: Finish the edit session of the defaults, close the window, then restart the automatic analysis.

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.

2471   [*n*] has an invalid communications port specified. It cannot be initialized.

Cause: The communications port specified for this analyzer during installation (or configuration) is invalid.

Action: Use the *Setup* program to change the analyzer configuration.

2474   [*n*] communications port [*n*] specified in the program control files is already in use. Unit cannot initialize.

Cause: The communications port assigned to the indicated unit is in use by another program.

Action: End the program using the busy port or use the *Setup* program to change the communications port assigned to this program.

2475   [*n*] communications port [*n*] specified in the program control files cannot be accessed. Unit cannot initialize.

Cause: The operating system has prevented the application from accessing the communications port.

Action: Review the hardware configuration of the computer. Ensure no other application is using the port. Contact a Micromeritics service representative if this error message continues.

2476   [*n*] startup failed. Cannot initialize the communications port.

Cause: The communications port specified during installation is invalid.

Action: Use the *Setup* program to change the analyzer configuration. 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 A: Run the *Setup* program and ensure that a valid port is specified; if not, specify a valid one when prompted.

Action B: Reinstall the application, then restart the application.

Action C: Contact a Micromeritics service representative if this error message continues.

2478   **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.

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   **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   **Could not construct [*n*] report type. Program will terminate.**

2487   **Could not start report generator. Error code [*n*]. Program will terminate.**

Cause A: Full rights to the application's 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 for editing.**

Cause: The specified file is open for editing.

Action: Check the *Window* menu item to locate the other edit session.

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

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

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

2490   **No '.INI' file present. Application will terminate.**

Cause: The ASCII .INI file containing initialization information and system options information used during program startup does not exist.

Action: Restore the .INI file from back-up, or re-install the application.

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.

2501 **System resources have reached a dangerously low level. Please close some windows to avoid the loss of data.**

Cause: A large number of windows are open and consuming the system resources.

Action: Close one or more windows. Contact a Micromeritics service representative if this error message continues.

2505 **Error logger cannot be initialized. Error code [n]. Program will exit.**

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

Action: Contact your Micromeritics Service Representative.

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

Cause: The selected sample file does not have collected data and cannot be used for operations, for example, reporting.

Action: Enter the name of a file with a status of *Complete*, *Analyzing*, or *Entered*. Alternatively, select a sample file from the list box.

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.

2515 **Warning: Changing the calibration information will affect the performance of the instrument. Only qualified service personnel should do this. Do you wish to proceed?**

Cause: The process of performing a calibration operation was started.

Action: Calibration operations should only be done by or under the direction of qualified service personnel.

2516 **Warning: Keeping a backup copy of the calibration data is recommended by Micromeritics. Would you like to do so now?**

Cause: A calibration operation was performed and a backup copy is recommended.

Action: Save the calibration data to a file.

2517 **Canceling this dialog will reset the calibration state to what it was when this dialog was first opened. Are you sure you want to cancel?**

Cause: The calibration has not been accepted upon the completion of the calibration operation.

Action: If the calibration operation was successful, click **Accept**.

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 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.

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 [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's 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.

2550   Attempts to acquire the instrument's status timed out.

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.

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.

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.

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.

2559   **SPC directory [*n*] does not exist.**

Cause: A directory in one or more of the files selected in a SPC Report is invalid.

Action: Click **Samples** in the SPC report and verify the locations of all sample files.

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.

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: Choose a different sample file for each port.

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.**

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 choose a sample file that already has the pressure points entered.

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

Cause: An attempt was made to start an analysis with an empty dose increment table.

Action: Add dose increment entries to the dose increment table in the analysis conditions.

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.

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 operator [*n*]. It is a restricted file type.**

2613   **File [*n*] cannot be modified by operator [*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.

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*].**

Cause: Refer to the error code provided.

Action: Contact your Micromeritics Service Representative.

2636   **Cannot log in as a guest.**

Cause: Guest account was used as a login.

Action: Use a valid user account that's not a guest account.

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*].**

Cause: Refer to the error code provided.

Action: Contact your Micromeritics Service Representative.

2640   **Timeout error [*n*].**

Cause: Refer to the error code provided.

Action: Contact your Micromeritics Service Representative.

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.

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 Po 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$_0$* 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.

4011   **Analysis gas in sample file does not match analysis gas in unit.**

Cause: An attempt was made to start an analysis using a sample file in which the analysis gas specified does not match the analysis gas entered in the unit configuration.

Action A: If the wrong adsorptive was selected in the sample file, change the adsorptive in the file.

Action B: If necessary, attach the appropriate gas cylinder, then enter the gas in *Unit Configuration*.

4012   **Psat gas in sample file does not match any gas in the unit.**

Cause: If using *Measure psat of a gas in P$_o$ and T* options in *Analysis Conditions*, the selected gas is not one of the selected gases in *Unit Configuration*.

Action A: If the incorrect psat was selected, change the psat gas.

Action B: If the gas was recently connected to the analyzer, update the *Unit Configuration*.

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*.

4021 **The entered [*n*] value ([*n*] and Temperature Option of the Analysis Conditions is outside the range of the pressures listed in the Psat vs Temperature Table (Adsorptive Properties).**

Cause: The entered P_0 value is not within the range of pressures selected for analysis.

Action A: Enter a new P_0 value.

Action B: Add more pressures and corresponding temperatures to the *Analysis Conditions* pressure table to include the presently selected P_0 value.

4022 **The entered bath temperature value ([*n*] 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 bath temperature is outside of the range of temperatures specified in the *Adsorptive Properties*.

Action A: Change the entered temperature.

Action B: Change the adsorptive.

Action C: Add more temperatures and corresponding pressures to *Adsorptive Properties*.

4023 **The file [*n*] cannot be prepared for analysis. It is open for editing and contains errors.**

Cause: An attempt was made to start an analysis using a file that contains errors and is open

for editing.

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

4024   Backfill gas in sample file does not match any gas in the unit.

Cause: The backfill gas specified in the sample file does not match the analysis gas entered in the *Unit Configuration.*

Action A: If the wrong backfill gas was selected in the sample file, change the backfill gas in the file.

Action B: If necessary, attach the appropriate gas cylinder, then enter the gas in the *Unit Configuration*.

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-Astkahov: 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.

4027   Fewer than two sample files have data suitable for heat of adsorption reports.

Cause: Less than two of the selected sample files for heat of adsorption reports contain appropriate data.

Action: Edit the *Quantity Adsorbed* table, or select other sample files.

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.

4030   Preparations failed in primary data.

Cause: Appropriate data were not available to generate the report.

Action: This message was preceded by a different error message. Refer to the cause/action of the preceding message.

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.

4037 **Computations failed while processing the primary data set. No reports will be produced.**

Cause: The preparation of data for reporting could not be successfully completed. No Horvath-Kawazoe reports will be produced. This message will always be preceded with another one containing additional information.

Action: Refer to the error message number which preceded this one for an explanation.

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 Vm. 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   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.

4042   0.0 cannot be a starting or ending pressure for a geometric progression from low pressure.

4043   1.0 cannot be a starting or ending pressure for a geometric progression toward saturation.

Cause: An attempt was made to generate a pressure table from a geometrically progressing range.

Action: Change the specified entered value.

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.

4050   **None of the requested quantities adsorbed is within the range of the collected data of more than one sample file.**

Cause: The *Heat of Adsorption* report failed because the specified quantities are not within the range of the collected data.

Action: Edit the quantities adsorbed so that they are within the range of the collected data, or select other sample files.

4051   **The sample [*n*] does not have any data in the range of the requested quantities adsorbed.**

Cause: The sample data cannot be interpolated to any of the quantities adsorbed.

Action: Edit the quantities adsorbed so that they are within the range of the collected data.

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 Lang-muir 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 iso-therm.

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.

4069   Dosing method choice is invalid - the Analysis Conditions choice of *Absolute pressure dosing* **requires that the Adsorptive Properties** *Dosing Method* **is set to** *Normal***.**

Cause: There is an incompatibility between the analysis conditions choice of Absolute pressure dosing and the adsorptive properties dosing method.

Action: Edit one of the choices.

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.

4073 **The analysis gas [*n*] does not match the model gas [*n*].**

Cause: The model assumes a specific gas, and the sample file uses a different one.

Action: Select a model that assumes the same gas.

4074 **The analysis temperature [*n*] does not match the model temperature [*n*].**

Cause: The temperature for the selected model did not match the analysis temperature.

Action: Select a different model.

4075 **The models cannot be located in the models folder. Reinstall the software.**

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

Action: Reinstall the application.

4076 **Invalid sample file - Adsorptive Properties** *Non-condensing adsorptive* **cannot be used unless Analysis Conditions** *Absolute pressure dosing* **is selected.**

Cause: *Non-condensing adsorptive* is selected in Analysis Conditions / Adsorptive Properties and the *Absolute pressure dosing* check box is not selected in Analysis Conditions.

Action: If *Absolute pressure dosing* is needed, select *Absolute pressure dosing* on the Analysis Conditions window. Otherwise, edit the Analysis Conditions / Adsorptive Properties and deselect *Non-condensing adsorptive*.

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.

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.

4135 **HOA file [*n*] does not exist.**

Cause: The sample file in the *Heat of Adsorption* report list does not exist.

Action: Go to **Report > Heat of Adsorption**. Click **Add Samples**, then select the sample file.

4136 **HOA file [*n*] is corrupt.**

Cause: The sample file in the *Heat of Adsorption* report list is corrupt.

Action: Go to **Report > Heat of Adsorption**. Select the corrupt sample file, then click **Remove Sample**. Rerun the *Heat of Adsorption* report.

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 turn off the analyzer. Then turn on the analyzer and restart the application. If the problem persists, contact your Micromeritics representative.

6101 **Configured serial number does not match instrument.**

Cause: The serial number of the analyzer is different than the serial number the application expects.

Action: Run the setup program on the installation media to remove then re-add the correct serial number.

6102 **The instrument [*n*] is not calibrated.**

Cause: One or more calibration operations have not been performed.

Action: If using the setup media, reinstall the calibration files. If this does not correct the problem, contact your Micromeritics representative.

6204 **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*.

6206 **Error dosing.**

Cause: The degas system failed to dose the backfill gas to a pressure of 850 mmHg.

Action: The gas regulator may be set too low or turned off.

6212 **Calibrating. This action must be completed before the application exits.**

Cause: The unit is calibrating.

Action: Do not exit the application until the calibration is complete.

6213 **Error overheating on port [*n*]. Current = [*n*], Target = [*n*], Limit = [*n*].**

Cause: A heating mantle and/or its thermocouple are not plugged into the correct port.

Action: Verify heating mantle connections. Contact a Micromeritics service representative if this error message continues.

6217 **Error thermocouple unplugged on port [*n*]. Target = [*n*].**

Cause: The thermocouple is not plugged into the correct degas port.

Action: Check the heating mantle connections for the specified degas port.

6218 **Error: SmartVac is not in a valid state to check degas.**

Cause: *Check* was selected to check degassing but the sample was not in an appropriate state. The degassing operation can only be checked after the vacuum setpoint has been attained or during a temperature ramp or hold.

Action: Wait until an appropriate time during the degassing operation and check the degassing operation again.

6219   The file name [*n*] has already been used.

Cause: A file name was entered that is already in use.

Action: Enter a unique file name.

6220   There are currently no available ports to start a degas operation.

Cause: All degas ports are in use.

Action: Wait until the degas operation is complete on a port, then another degas operation may be started.

6221   An evacuation cannot be started because all degas ports are currently in use.

Cause: All degas ports are in use.

Action: Wait until the degas operation is complete on a port, then an evacuation can be started on the port.

6222   At least one port must be selected before an evacuation can be started.

Cause: **Start** was selected on the *Evacuate Degas* window without first selecting a port.

Action: Select the port to evacuate, then select **Start.**

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: Choose *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_0 gas other than the P_0 gas currently being used. All current analyses must use the same P_0 gas.

Action A: Change the gas in the sample file to use the current P_0 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.

6241   **Maximum time limit exceeded before the port [*n*] elevator reached the UP position.**

Cause A: The maximum time for the analysis was exceeded before the elevator reached the UP position. Ice may be present in the bottom or the neck of the dewar.

Action A: Check the dewar and remove ice if necessary. Then restart the analysis.

Cause B: The Psat tube is interfering with elevator movement.

Action B: Ensure the Psat tube is close to the sample tube and the dewar lid is over both the sample and Psat tubes. Then restart the analysis.

6241   **Maximum time limit exceeded before the port [*n*] elevator reached the DOWN position.**

Cause: The maximum time for the analysis was exceeded before the elevator reached the UP position. Ice may be present in the bottom or the neck of the dewar.

Action: Check the dewar and remove ice if necessary. Then restart the analysis.

6244   **[*n*] Analysis canceled. Time limit exceeded while storing analysis gas in Psat tube.**

Cause A: The time limit (10 minutes) was exceeded while storing the analysis gas in the Psat tube. The Psat gas regulator may be set too low or turned off.

Action A: Set the Psat gas regulator to 15 psig (1.03 bar). Then restart the analysis.

Action B: The Psat gas cylinder is empty.

Action C: Connect a new Psat gas cylinder. 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 6 [*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 station 6 with an empty tube.
   2. Backfill with krypton gas to 20 mmHg.
   3. Raise the dewar in Station 6.

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

Cause B: The dewar on sample port 6 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: Choose *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 1:   Click **Yes** to perform the analysis. The minimum increment will automatically be used in place of increments that are too small.

Action 2:   Click **No**. Increase the sizes of the increments.

Action 3: Click **No**. Use more sample so that the requested increment per gram of sample amounts to an absolute increment that exceeds the minimum.

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.

6516   **Sample pressure greater than [*n*] is not allowed.**

Cause: An absolute pressure greater than (pressure) mmHg was attained during low pressure dosing (either fixed dose mode or incremental dose mode).

Action: The analysis was canceled. All previously collected data were stored.

6517   **Total volume dosed greater than [*n*] is not allowed.**

Cause A: The maximum total volume dosed in an analysis was exceeded.

Action A: Perform leak checks on the system. Contact your Micromeritics Service Representative.

Cause B: The value for the P_0 may be too low, causing the analyzer to mistake condensation for actual adsorption

Action B: Change the analysis variables to directly measure the value of P_0 during the experiment.

Cause C: The amount of sample used may be too large. Multiply the maximum value from the Volume Adsorbed column of the Isotherm Report by the sample weight. If the result exceeds (volume) cm^3, the amount of sample is too large.

Action C: Reduce the amount of sample.

6518   **Pressure of [*n*] exceeds the maximum manifold pressure of [*n*].**

Cause: The maximum pressure in the analysis was exceeded.

Action: Contact your Micromeritics Service Representative.

6519   **Psat gas is not condensing.**

Cause A: The working dewar does not contain enough bath liquid.

Action A: Retry the operation after filling the dewar.

Cause B: The Psat gas is contaminated.

Action B: Replace the Psat gas supply.

Cause C: The Psat tubing from the regulator to the analyzer is contaminated.

Action C: Pump out the tubing.

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.

6522 **Time limit exceeded while evacuating manifold.**

Cause A: Maximum manifold evacuation time was exceeded before the vacuum set point was achieved. Vacuum pump may be turned off.

Action A: Turn on vacuum pump switch. Then restart the analysis.

Caution B: The vacuum pump oil level is low.

Action B: Check the vacuum pump oil level and add more oil if necessary. Then restart the analysis.

Cause C: The manifold is contaminated or leaking.

Action C: Correct the problem. Refer to the analyzer Operator Manual on testing for leaks. Then restart the analysis.

6523 **Analysis canceled: Time limit exceeded while evacuating sample (unrestricted).**

Cause: The maximum time for evacuating the sample through the unrestricted valve was exceeded. Possible causes are a leak in the sample tube fitting or a crack in the

sample tube.

Action: Check the sample tube and the sample tube fitting; ensure that the tube is securely attached to the port. Then restart the analysis.

6524 **Analysis canceled: Time limit exceeded while evacuating sample (servo).**

Cause: The maximum time for evacuating the sample through the restricted valve was exceeded. Possible causes are a leak in the sample tube fitting, a crack in the sample tube, or a poorly degassed sample.

Action: Check the sample tube and the sample tube fitting; ensure that the tube is securely attached to the port. Verify that the sample is properly degassed; then resume the analysis.

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

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

Action A: Set the 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.

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