

# ***SEDIGRAPH<sup>®</sup> III PLUS***

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***PARTICLE SIZE ANALYZER***



***ERROR MESSAGES***

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Apr 2021

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## ***CORPORATE PROFILE***

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Micromeritics Instrument Corporation is the world's leading supplier of high-performance systems to characterize particles, powders and porous materials with a focus on physical properties, chemical activity, and flow properties. Our technology portfolio includes: pycnometry, adsorption, dynamic chemisorption, particle size and shape, 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, prestigious government, and academic institutions. Our world-class scientists and responsive support teams enable customer success by applying Micromeritics technology to the most demanding applications. For more information, please visit [www.Micromeritics.com](http://www.Micromeritics.com).

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## ***ERROR MESSAGES***

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

### **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 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 wrong [n] bytes, expected [n] bytes.**

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

*Action:* Contact your Micromeritics Service Representative.

**2436 Path specification [n] is invalid.**

*Cause:* An invalid path name and/or extension was entered.

*Action:* Enter a valid path name (including the proper extension), then press **Enter**.

**2437 File name [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.

**2439 Cannot 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.

**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.

**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 ana-

lyzer 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 analyzers 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 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 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:*

- 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.

**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 computer 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.

**2487** Cannot start report generator. Error code [n]. 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.

*Cause B:* The specified file is set to read-only.

*Action B:* Right-click the file, select *Properties* and change the read-only setting.

**2490** No '.INI' file present. Program 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.

**2502 Error writing to file [n] during print. Error code [n].**

*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.

**2505 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.

**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 Overlay [n] was not found. It will not be included in the reports.**

*Cause:* The specified overlay file could not be found.

*Action:* Ensure the file specified as an overlay exists.

**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 select 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**.

**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.

**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.

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

*Cause:* An internal error occurred while read control information was being read from a disk file.

*Action:* The disk on which the application is installed may have failed. Contact your Micromeritics service representative and report the code number given in the message.

**4201 No reports selected.**

*Cause:* No reports were selected in the *Reports to Generate* list box. No output could be produced.

*Action:* Ensure that at least one report is selected for the sample and re-submit the sample for reporting.

**4202 No valid data to report.**

*Cause:* The selected analysis in the sample file activated for reporting does not contain any valid data.

*Action:* If the sample is still analyzing, wait until enough data have been collected to allow reporting. If the sample is complete, an error or operator intervention stopped this analysis before sufficient data could be collected. The analysis may be deleted from the file.

**4203 The reference file is not valid. 'Diff. from ref.' column was deleted.**

*Cause:* A tabular report was requested with *Difference from reference* selected as one of the columns. This quantity cannot be computed because the reference file is invalid.

*Action:* If no reference file has been specified, select one from the *Report Options* window and re-run the reports. If a file has been specified, ensure that it contains valid information.

**4204 Coarser specification file is not valid. 'Out of spec.' column was deleted.**

**4205 Finer specification file is not valid. 'Out of spec.' column was deleted.**

*Cause:* A tabular report was requested with *Out of Specification* selected as one of the columns. This quantity cannot be computed because the coarse specification file is invalid.

*Action:* If no specification file has been specified, select one from the *Report Options* window and re-run the reports. If a file has been specified, ensure that it contains valid information.

**4206 The tabular report has no valid columns selected. No report produced.**

*Cause:* A tabular report was requested with all of the columns set to none.

*Action:* Edit the options for that table and select a variable in at least one column of the table.

**4207 No valid data is available for this report. No report produced.**

*Cause:* The selected test in the sample file activated for reporting does not contain any valid data.



*Action:* If the sample is still analyzing, wait until enough data have been collected to allow reporting. If the sample is complete, an error or operator intervention stopped this analysis before sufficient data could be collected. The analysis may be deleted from the file.

**4208 An overlay file is not valid. It was not included in the report.**

*Cause:* The sample file selected for overlay does not exist or contains invalid data.

*Action:* From the *Report Options* window, click *Overlays* and remove the sample file.

**4209 The reference file is not valid. The report was not produced.**

*Cause:* The *Difference from Reference* graph was selected. It cannot be computed because the reference file is invalid.

*Action:* If a reference file has not been specified, select one from the *Report Options* window and re-run the reports. If a file has been specified, ensure that it contains valid information.

**4210 Coarser specification file is not valid. The report was not produced.**

**4211 Finer specification file is not valid. The report was not produced.**

*Cause:* The *Out of Specification* graph was selected. It cannot be computed because the coarse specification file is invalid.

*Action:* If a specification file has not been specified, select one from the *Report Options* window and re-run the reports. If a file has been specified, ensure that it contains valid information.

**6007 [n] Bubble elimination failed. Operation canceled.**

*Cause A:* A wetting agent may be required to aid in bubble elimination.

*Action A:* Add one drop of Photo-Flo 200 or other wetting agent to the mixing chamber.

*Cause B:* Cold suspension fluid was introduced to the heated mixing chamber and cell, causing the release of dissolved gases.

*Action B:* Warm the suspension fluid prior to introduction, or allow it to circulate in the mixing chamber for several minutes before starting the analysis.

*Cause C:* Dispersion indicated in cell is not uniform.

*Action C:* Wait to see if bubbles are eliminated. Then check tubing for clogs or damage. Replace tubing if necessary.

*Cause D:* The sample material being analyzed requires more suspension energy.

*Action D:* Change the analysis options to increase the pump speed specified for the fullscale scan operation. After changing the sample file, repeat the analysis.

*Cause E:* The sample material being analyzed has a high density.

*Action E:* Change analysis options to reduce the sensitivity of the bubble detection method. After changing the sample file, repeat the analysis.

**6008 [n] Bubble elimination difficulties encountered.**

*Cause A:* A wetting agent may be required to aid in bubble elimination.

*Action A:* Add one drop of Photo-Flo 200 or other wetting agent to the mixing chamber.

*Cause B:* Cold suspension fluid was introduced to the heated mixing chamber and cell, causing the release of dissolved gases.

*Action B:* Warm the suspension fluid prior to introduction, or allow it to circulate in the mixing chamber for several minutes before starting the analysis.

*Cause C:* Dispersion indicated in cell is not uniform.

*Action C:* Wait to see if bubbles are eliminated. Then check tubing for clogs or damage. Replace tubing if necessary.

*Cause D:* The material under analysis requires more suspension energy.

*Action D:* Change the cell pump speed in your analysis options, then repeat the analysis.

*Cause E:* Material under analysis has high density.

*Action E:* Change the bubble detection method to medium or coarse in your analysis options, then repeat the analysis.

**6009 [n] Failure reestablishing full scale concentration. Analysis will continue.**

*Cause A:* The system could not reach the same level of sample suspension as during the previous full-scale scan.

*Action A:* Cancel the current analysis. Use manual control to change the cell pump speed to 5 and operate the pump for one or two minutes. Repeat the analysis.

*Cause B:* Sample residue is trapped in the system.

*Action B:* Check the tubing and fittings for clogs and residue. Squeeze the tubing at all locations where residue is trapped. Repeat the analysis.

**6010 [n] Sample concentration is low. Analysis will continue.**

*Cause A:* Too little sample was used, causing a 13% change in X-ray adsorption.

*Action A:* Cancel the current analysis. Using manual control, turn on both pumps and add more dispersed sample to the mixing chamber. Restart the analysis.

*Cause B:* The sample requires more suspension energy.

*Action B:* Cancel the current analysis. Using manual control, operate the cell pump in the UP direction at pump speed 5 for one or two minutes. Restart the analysis.

**6011 [n] Sample concentration is high. Analysis will continue.**

*Cause:* Too much sample was used, causing more than a 75% change in X-ray absorption.

*Action:* Cancel the current analysis. Using manual control, turn on both pumps and add more dispersing liquid to the mixing chamber to dilute the sample mixture. Restart the analysis.

**6012 [n] No x-rays detected.**

*Cause A:* The solid portion of the cell is blocking the X-rays from the detector.

*Action A:* Using manual control, move the cell to a different position.

*Cause B:* The slit in the X-ray source or detector is blocked.

*Action B:* Clean the slits in the X-ray source to remove any residue. Refer to *Cleaning the Collimating Slits* in the Operator Manual.

**6013 [n] No x-rays detected due to key at Standby.**

**6014 [n] No x-rays detected due to door open.**

**6015 [n] No x-rays detected due to panel off.**

**6016 [n] No x-rays detected due to X-ray filament over-current.**

**6017 [n] No x-rays detected due to X-ray lamp-off.**

*Cause:* No x-rays are detected due to the problem described in the error message.

*Action:* Correct the problem, then restart the operation.

**6018 [n] No x-rays detected. Automatic operation will cancel.**

*Cause A:* The solid portion of the cell is blocking the X-rays from the detector.

*Action A:* Using manual control, move the cell to a different position.

*Cause B:* The slit in the X-ray source or detector is blocked.

*Action B:* Clean the slits in the X-ray source to remove any residue. Refer to *Cleaning the Collimating Slits* in the Operator Manual.

**6019 [n] No x-rays detected due to key at Standby. Automatic operation will cancel.**

**6020** [n] No x-rays detected due to door open. Automatic operation will cancel.

**6021** [n] No x-rays detected due to panel off. Automatic operation will cancel.

**6022** [n] No x-rays detected due to X-Ray filament over-current. Automatic operation will cancel.

**6023** [n] No x-rays detected due to X-Ray lamp off. Automatic operation will cancel.

*Cause:* No x-rays are detected due to the problem described in the error message. The automatic operation that is in progress will be canceled.

*Action:* Correct the problem, then restart the operation.

**6024** [n] Error rinsing system. Cannot reestablish baseline concentration.

*Cause A:* The dispersing liquid being used is different from the one used for measuring the baseline.

*Action A:* Perform a baseline measurement using the current dispersing liquid.

*Cause B:* Sample residue has remained in the cell.

*Action B:* Cancel the current operation. Using manual control, select the *Flow Up in Cell direction* for the cell pump at pump speed 5 for one or two minutes. Also check for clogs in the tubing and crimped tubing as necessary. Visually inspect the cell windows, clean or replace as necessary. Refer to *Preventive Maintenance* in the Operator Manual.

**6025** [n] Cannot find beamsplit.

**6026** [n] Cannot find beamsplit. Automatic operation will cancel.

*Cause A:* The cell has been removed from the analyzer.

*Action A:* Replace the cell and resume operation.

*Cause B:* The cell elevator is not operating properly.

*Action B:* Contact your Micromeritics Service Representative.

**6027** [n] Not enough cell travel to perform an analysis.

**6028** [n] Not enough cell travel. Automatic operation will cancel.

*Cause A:* Cell assembly is assembled improperly.

*Action A:* Disassemble the cell assembly and reassemble. Ensure the sloped portions of the cell body and the retaining plates are aligned. Refer to *Cleaning the Analysis Cell* in the Operator Manual.

*Cause B:* The upper limit switch of the cell elevator must be reset.

*Action B:* Contact your Micromeritics Service Representative.

**6029 [n] Upper limit switch not found.**

*Cause A:* The cell position counter is too far out of position to find the upper limit switch. The lower limit switch may have been triggered.

*Action A:* Using manual control, move the cell to the upper limit switch; this resets the cell position counter.

*Cause B:* The cell elevator is not operating properly.

*Action B:* Contact your Micromeritics Service Representative.

*Cause C:* The upper limit switch is operating improperly.

*Action C:* Contact your Micromeritics Service Representative.

**6030 [n] Error moving cell.**

**6031 [n] Error moving cell. Automatic operation will cancel.**

*Cause A:* Some object or the cell tubing is preventing the cell elevator from moving.

*Action A:* Check for and remove object, or reposition the cell tubing.

*Cause B:* The cell elevator is operating improperly.

*Action B:* Contact your Micromeritics Service Representative.

**6032 [n] Sample concentration is low. Analysis will continue.**

*Cause:* The temperature of the analysis compartment at the time of the analysis is not within the range defined by the liquid properties specified in the sample file.

*Action:* Go to **Unit [n] > Unit Configuration**. Either change the analysis compartment temperature, then click the **Set Temperature** or change the liquid properties in the associated sample file.

**6033 [n] Liquid density must be less than sample density.**

*Cause:* The density of the dispersing liquid is too high for the sample being analyzed

*Action:* Switch the dispersing liquid to one with density lower than that of the sample.

**6034 [n] Fan problem [n].**

*Cause:* One or both of the cooling fans are operating at less than 70% of the normal speed. The code values are: 1,0 means the PMT fan has the problem; 0,1 means the X-ray fan has the problem; 1,1 means both fans have the problem. The third fan (located

under the tube's anode) will need to be checked visually. The third fan (located under the tube's anode) will need to be checked visually. To access to the fan, remove the analyzer cover then remove the shield.

*Action:* Turn off the analyzer. Contact your Micromeritics Service Representative.

**6035 [n] Electronics problem.**

*Cause:* An electronic component is not operating to specification.

*Action:* Power off the analyze. Contact your Micromeritics Service Representative.

**6036 [n] Using mixing chamber speed of (n) which differs from requested speed of (n). Analysis will continue.**

*Cause:* The mixing chamber speed specified in the sample file being analyzed (requested speed) is not the same as the speed at which the mixing chamber is currently operating.

*Action:* No action required unless the mixing chamber speed needs to be adjusted. In this case, enable manual control and adjust the speed.

**6037 [n] Fan problem [n]. Automatic operation will cancel.**

*Cause:* One or both of the cooling fans are operating at less than 70% of the normal speed. The code values are: 1,0 means the PMT fan has the problem; 0,1 means the X-ray fan has the problem; 1,1 means both fans have the problem. The third fan (located under the tube's anode) will need to be checked visually. To access to the fan, remove the analyzer cover then remove the shield.

*Action:* Turn off the analyzer. Contact your Micromeritics Service Representative.

**6038 [n] Electronics problem. Automatic operation will cancel.**

*Cause:* An electronic component is not operating to specification.

*Action:* Turn off the analyzer. Contact your Micromeritics Service Representative.

**6039 [n] Error moving turntable.**

**6040 [n] Error moving turntable. MasterTech automatic operation will cancel.**

**6041 [n] Error moving arm assembly.**

**6042 [n] Error moving arm assembly. MasterTech automatic operation will cancel.**

*Cause:* The arm is in the *Load* position or something is preventing the beaker tray from moving.

*Action:* Ensure the arm is not in the *Load* position or that nothing is preventing the beaker tray from moving.

**6043 [n] Not present.**

*Cause A:* The MasterTech has been powered off.

*Action A:* Check the power connection and ensure the POWER ON/OFF switch on the MasterTech is in the ON (1) position.

*Cause B:* The MasterTech is not properly connected to the analyzer.

*Action B:* Check the control cable from the MasterTech to ensure that it is properly connected.

**6044 [n] Turntable not present.**

**6045 [n] Turntable not present. MasterTech automatic operation will cancel.**

*Cause:* The turntable is not properly installed on the MasterTech.

*Action:* Install the turntable as described in the Installation Manual.

**6046 [n] Arm assembly at the load position.**

**6047 [n] Arm assembly at the load position. MasterTech automatic operation will cancel.**

*Cause:* An attempt was made to perform an operation that is inoperable when the arm is in the *Load* position.

*Action:* Press the front panel switch to take the arm out of the *Load* position.

**6048 [n] Cannot find position 1 on the turntable.**

*Cause:* The turntable may not be seated properly. If the turntable is moving properly, a service problem may be indicated.

*Action:* Contact your Micromeritics Service Representative.

**6049 [n] No beaker is present in position (n).**

**6050 [n] No beaker is present in position (n). MasterTech automatic operation will cancel.**

*Cause:* An action was requested, such as a MasterTech rinse, but there is no beaker present in the specified position.

*Action:* Insert a beaker at the specified position and restart the operation.

- 6057 Conversion aborted. Unrecoverable error converting [n] into [n].**  
*Cause:* An error occurred when converting a non-Windows file to the Windows format.  
*Action:* The file cannot be converted. Contact your Micromeritics Service Representative.
- 6058 At least one item must be selected for recording.**  
*Cause:* The *Start Recording Service Test* step requires that at least one signal be selected for recording.  
*Action:* Select a signal or click **Cancel**.
- 6059 An incompatible table with that name already exists.**  
*Cause:* In a *Service Test* script, data collected have names, each of which must be unique.  
*Action:* Specify a different name for the data.
- 6060 Unable to read the calibration file [n].**  
*Cause:* The calibration file selected for loading is not valid or cannot be read.  
*Action:* Confirm the media containing the alleged calibration file has no problems.
- 6061 Unable to write the calibration file [n].**  
*Cause:* An attempt to Save calibration data has failed due to possible media problems  
*Action A:* Confirm the media containing the alleged calibration file has no problems.  
*Action B:* Choose an alternate media to Save the calibration data.
- 6062 The instrument (unit number) is not calibrated.**  
*Cause:* Calibration information for various analyzer components are missing.  
*Action:* Run the application setup program and reinstall calibration information for the specified unit.
- 6063 File cannot be opened for writing. It is already in use.**  
*Cause:* A *File Save As* operation failed because the specified file is already in use.  
*Action:* Specify a different file.
- 6064 The sample file [n] is not in a valid state to resume the analysis.**



*Cause:* The status of the sample file has changed since last used. It can no longer be used as part of an analysis.

*Action:* Select a new sample file, and restart the analysis.

**6065 You need to choose a sample file.**

*Cause:* **OK** was selected on a schedule entry window, but a sample file was not selected.

*Action:* Click **Browse** and select a sample file.

**6066 There is no more room for another test in this sample.**

*Cause:* A sample file was selected for analysis that already contains eight tests.

*Action:* Select a different sample file, or delete one of the previous tests from the file.

**6067 The current baseline does not match the one already in the sample.**

*Cause:* A sample file was selected that contains some analyses that were performed using a different baseline.

*Action:* Select a sample file that either has no tests, or has tests that were performed using the current baseline.

**6068 The previous tests of this sample were run on a different SediGraph.**

*Cause:* A sample file was selected that contains some analyses that were performed using a different analyzer.

*Action:* Either perform the new analysis on the same analyzer, or select a different sample file.

**6069 The sample has an invalid status and cannot be used for this analysis.**

*Cause:* A sample file was selected that cannot be analyzed.

*Action:* Select a file that has a status of *No Analysis* or *Complete*.

**6070 [n] There is no baseline available for this unit.**

*Cause:* No baseline has been measured for this unit.

*Action:* Measure a baseline before performing sample analyses.

**6071 Configured serial number does not match instrument.**

*Cause:* The serial number stored in the analyzer does not match the serial number stored with the software.

*Action:* Contact your Micromeritics Service Representative.

**6078 The current hardware does not match the calibration.**

*Cause:* One or more calibrated components have been replaced in the analyzer.

*Action:* Contact your Micromeritics Service Representative.

**6079 The Schedule contains duplicate beaker entries. Are you sure you want to continue?**

*Cause:* **Start** was clicked on the *MasterTech Schedule* window and there is more than one entry in the schedule that has the same beaker number.

*Action:* Click **No** to stop the operation and fix the schedule. Click **Yes** to continue with the schedule.

**6080 Cell nominal temperature value not in the expected range of [n].**

*Cause:* During temperature calibration, the value read is outside of the expected range.

*Action:* Confirm that the correct temperature calibration resistor is being used.

**6082 Mixing chamber nominal temperature value not in the expected range of [n] to [n].**

*Cause:* During temperature calibration, the value read is outside of the expected range.

*Action:* Confirm that the correct temperature calibration resistor is being used.

**6088 The cell temperature reading of [n] is invalid. If an analysis is in progress you may choose to cancel it.**

**6089 The mixing chamber temperature reading of (nnn.nn) is invalid. If an analysis is in progress you may choose to cancel it.**

*Cause:* A temperature reading outside of the valid range has occurred.

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

**6090 The sample is already scheduled to be used for another analysis.**

*Cause:* A sample file was requested for an analysis that is already scheduled in the *MasterTech schedule* or the *Repeat schedule*.

*Action A:* Select a different sample that is not scheduled in the *MasterTech schedule* or the *Repeat schedule*.

*Action B:* Remove the sample from where it is already scheduled and then try again.