MIC SAS® II 5800

SUB-SIEVE AUTOSIZER



micromeritics®

Effective Solutions for Material Characterization

PRE-INSTALLATION INSTRUCTIONS AND CHECKLIST

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ABOUT THIS MANUAL

The following icons may be found in this document:



NOTE — Notes contain important information applicable to the topic.



<u>CAUTION</u> — Cautions contain information to help prevent actions that may damage the analyzer or components.



<u>WARNING</u> — Warnings contain information to help prevent actions that may cause personal injury.



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1 Pre-installation Document Overview





If a Micromeritics Service Technician performs this installation, additional charges apply. Please see *Contact Us on page i* for information on how to contact Micromeritics.

This document describes how to prepare a site for installation of the MIC SAS II 5800. If Micromeritics will be performing this installation, when the enclosed procedures have been completed, return the signed and dated form to Micromeritics as outlined in <u>Dates and Signatures</u> on page 4 - 1. If unsure about any part of this document or the checklist, contact the Micromeritics Service Department for clarification.



MICROMERITICS INSTALLED INSTRUMENTS ONLY

APPLICATION RELATED ISSUES

To ensure a thorough installation, it will be helpful for Micromeritics to know which types of samples will be tested. If known, list them in *Application Related Issues Checklist on page 3 - 3*.

Please advise Micromeritics if samples require any pretreatment. If required, do you have the proper equipment to pretreat your samples? Micromeritics offers application assistance through our materials analysis laboratory (Micromeritics Particle Testing Authority).

HAZARDS AND PRECAUTIONS

Inform Micromeritics of any on-site conditions that may present hazards to Micromeritics employees or equipment. Advise Micromeritics of any precautions that need to be taken.

SAFETY MEASURES

Inform Micromeritics of any safety equipment, requirements, or procedures necessary for Micromeritics employees to enter and install the system at your facility.

PERSONNEL SECURITY CLEARANCE

If security clearances, insurance certificates, or any other special arrangements are required for Micromeritics employees to enter your facility, see Personnel Security Clearance Checklist on page 3 - 4 to explain. Inform Micromeritics how much advance notice you require to obtain clearance.

PROJECTED INSTALLATION DATE

Read this entire document carefully. Complete all checklists in this document. Sign and return all checklists and the form in <u>Dates and Signatures on page 4 - 1</u> to Micromeritics. Micromeritics will contact you to confirm an installation date.



2 Pre-installation Instructions

UNPACKING AND INSPECTION

When the equipment is received, unpack and inspect the contents of the shipping container(s). Use the packing list to verify that all products, accessories, software (if applicable), and documentation are received intact and in the correct quantity. The shipping container(s) and contents should be inspected within a few days of receipt in the event damage or loss has occurred. Sort through all packing material before declaring missing equipment or parts.



Micromeritics recommends saving all shipping containers until installation of the equipment is complete. All shipping containers where equipment is to be declared as damaged or lost must be examined by the claims investigator prior to completion of the inspection report.

SHIPPING DAMAGE

If equipment is damaged or lost in transit, you are required to make note of the damage or loss on the freight bill. The freight carrier, not Micromeritics, is responsible for all damage or loss occurring during shipment. If damage or loss of equipment is discovered during shipment, report the condition to the carrier immediately. Insurance claims **MUST** be made with the freight carrier, **NOT** Micromeritics.

- Keep all software, manuals, and accessories with the equipment.
- Report any shipping damage immediately to the carrier and follow their directions.
- Report missing or wrong parts to Micromeritics, in addition to any shipping damage, only after filing a claim with the carrier.
- Micromeritics will NOT file a claim for shipping damage.
- Do not discard shipping boxes and containers until installation is complete. If space is available, it is recommended that shipping containers be saved for future use in the event of return to factory for repair.



ANALYZER SPACE



Analyzer

Height 50 cm (19.5 in.) Width 44 cm (17 in.) Depth 27 cm (10.5 in.) Weight 16 kg (34 lbs.)

Computer and Printer

Width 96.5 cm (38 in.) Approx.

Gas Supply

1 square ft (0.1 square m) for each gas cylinder needed for installation. For standard installations, the cylinders must be within 6ft. (2m) of the instrument.

INSTALLATION CONFIGURATION

Installation requires the use of Tygon gas supply lines located in the instrument accessories kit.



ENVIRONMENTAL FACTORS

POWER

The MIC SAS II 5800 is designed to operate with 100 / 240 VAC at 50 to 60 Hz. Noise-free power of the correct voltage and frequency, with a safety earth ground, should be available through a standard wall receptacle.



The analyzer and peripheral devices **must** be installed on their own dedicated power line. Other devices — such as motors, generators, or ovens — **should not** be placed on the same power line.

TEMPERATURE AND HUMIDITY

Temperature and humidity must be controlled to within:

• Temperature: 10 to 35 °C (50 to 95 °F) operating; 0 to 50 °C (32 to 122 °F) nonoperating

• **Humidity:** 20 to 80% relative, non-condensing

Do Not:

- Allow room temperature or humidity to exceed limits.
- Install the analyzer where it is exposed to direct sunlight.
- Locate the analyzer near air conditioning or heating vents.



GAS CYLINDERS AND GAS SUPPLY LINES

See <u>Gas for Analyzer Test below</u> for the analytical gas needed during installation. Gas cylinders must be placed within 6 ft (2 m) of the analyzer inlet valves.

- The customer is required to ensure the purity of gases.
- It is required that the Tygon tubing located in the instrument accessories kit is used.



Gas lines not supplied by Micromeritics will not be installed by Micromeritics Service Personnel.

- **Do not** use gas cylinders with less than 500 psig (3549 kPag) pressure.
- **Do not** use any other gas lines to connect the gas supply to the analyzer except those supplied in the accessories kit.
- Do not use gas purifiers; they can cause operational problems. Oxygen traps are preferred.

GAS REGULATOR

A two-stage gas regulator set to 15-20 psig (100-140 kPa) is required.

LABORATORY EQUIPMENT AND SUPPLIES

GAS FOR ANALYZER TEST

To verify proper analyzer operation and to train users, Micromeritics representatives will analyze the reference material provided in the analyzer accessories kit. If the required gas is not available, Micromeritics representatives will not be able to perform analyzer tests during installation and operator training.

The following gas is required in order to analyze the reference materials. If this gas is not available, Micromeritics representatives will only be able to perform a limited number of analyzer tests during installation and operator training.

• Dry grade compressed air cylinder, 19-24% oxygen, balance nitrogen



3 PRE-INSTALLATION CHECKLISTS

For each question, circle **Yes** if the condition applies to your laboratory or **No** if it does not. When this *Pre-installation Checklist* has been completed, see <u>Dates and Signatures on page 4 - 1</u>. Sign and date the form, then send it along with all completed checklists to Micromeritics.

UNPACKING AND INSPECTION CHECKLIST

Unpacking and Inspection		
Have the shipping cartons been unpacked and their contents inspected?	Υ	N
Was there any shipping damage?	Y	N
If Yes , has a claim been filed with the freight carrier?	Y	N
Were all items on the packing list received?	Y	N
If No , has Micromeritics been notified?	Υ	N

ANALYZER SPACE CHECKLIST

Analyzer Space		
Can the lab area where the analyzer will be placed accommodate the combined dimensions of the analyzer, accessories, and printer?	Y	N



ENVIRONMENTAL FACTORS CHECKLIST

Environmental Factors			
Is power available with the correct voltage and frequency, and a safety earth ground?	and a safety Y		
Are temperature and humidity controlled within specifications?	Y	N	
Are hazards present or precautions necessary in area of installation?	Y N		
If Yes , please explain:			
Are safety measures required?	Υ	N	
If Yes , please explain:			



GAS SUPPLY CHECKLIST

Gas Supply		
Is the gas cylinder located within 6 ft (2 m) of where the instrument will be located?	Y	N
Was the gas regulator purchased from Micromeritics?	Υ	N
If NO, does the gas regulator meet Micromeritics' specifications?	Υ	N
Required Gases		
Is the following <u>required</u> gas available?		
Dry grade compressed air cylinder, 19-24% oxygen, balance nitrogen	Y	N
Additional Gases		
Additional gases for use after installation can be connected by the Micromeritics series entative. Please list any gases that will be available for connection during install	•)-

APPLICATION RELATED ISSUES CHECKLIST

Application Related Issues		
What types of samples will be tested?		
Will these samples require pretreatment?	Y	N
Will any application assistance from Micromeritics Particle Testing Authority be required?	Y	N



PERSONNEL SECURITY CLEARANCE CHECKLIST

Security Clearance		
Are there any special arrangements required concerning security clearance?	Y	N
If Yes , please explain:		



4 DATES AND SIGNATURES



All checklists and this completed form should be returned only if Micromeritics will be performing this installation.

PROJECTED INSTALLATION DATE

This is not a commitment for a specific installation date. After reading the site preparation requirements in this document, enter a date your site will be prepared and a preferred date for installation. After returning the checklist and signed form to Micromeritics, your Micromeritics representative will contact you to confirm an installation date.

When would installation be most convenient? Date: _____/____/

COMMITMENT STATEMENT AND SIGNATURE FORM

I have read this document and understand my responsibilities regarding preparations for the installation of our analysis system. I believe this site is ready for the system to be installed.

Signature:		Date:			
Name (Printed):					
Title (Printed):					
Company:					
City / State / Zip:					
Phone Number:		Fax Number:			
E-mail:					
Analyzer:	Model:	Serial No.:			
Is the Customer Repre	esentative also the End	User? Yes	No		

RETURN THE COMPLETED CHECKLIST AND FORMS TO:

Micromeritics Instrument Corporation ATTN: Service Operations Manager 4356 Communications Drive Norcross, GA / USA / 30093-2901

Email: Service.Helpdesk@Micromeritics.com

Fax: 1-770-662-3604