ASAP® 2460

ACCELERATED SURFACE AREA AND POROSIMETRY SYSTEM

micromeritics®

PRE-INSTALLATION INSTRUCTIONS AND CHECKLIST

246-42870-01
Dec 2023
(Rev D)

micromeritics®

TRADEMARKS

Alconox is a registered trademark of the Alconox Company.
ASAP is a registered trademark of Micromeritics Instrument Corporation.
Micromeritics is a registered trademark of Micromeritics Instrument Corporation.
Microsoft and Windows are registered trademarks of Microsoft Corporation.
Swagelok is a registered trademark of Crawford Fitting Company.

Copyright

CORPORATE PROFILE

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

CONTACT US

Micromeritics Instrument Corporation
4356 Communications Drive
Norcross, GA 30093-2901 USA
Phone: 1-770-662-3636
Fax: 1-770-662-3696
www.Micromeritics.com

Instrument Service or Repair
Phone: 1-770-662-3636
International: Contact your local distributor or call 1-770-662-3636
Service.Helpdesk@Micromeritics.com

Micromeritics Application Support
Support@Micromeritics.com

ABOUT THIS MANUAL

This manual contains instructions for both standard installations and installations in 21CFR11 environments.

The following symbols or icons indicate safety precautions and/or supplemental information and may appear in this manual:

NOTE — Notes contain important information applicable to the topic.

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

WARNING — Warnings contain information to help prevent actions that may cause personal injury.

CFR Note

NOTE — Notes that apply to 21CFR11 environments only (Confirm applications).

GENERAL SAFETY

Do not modify this instrument without the authorization of Micromeritics Service Personnel.

Any piece of laboratory equipment can become dangerous to personnel when improperly operated or poorly maintained. All employees operating and maintaining Micromeritics instruments should be familiar with its operation and should be thoroughly trained and instructed on safety.

- Read the operator manual for any special operational instructions for the instrument.
- Know how the instrument functions and understand the operating processes.

- Wear the appropriate personal protective equipment when operating this instrument — such as eye protection, lab coat, protective gloves, etc.
- When lifting or relocating the instrument, use proper lifting and transporting devices for heavy instruments. Ensure that sufficient personnel are available to assist in moving the instrument. The ASAP 2460 master module weighs approximately 54 kg (119 lbs). Each auxiliary module weighs approximately 29 kg (64 lbs).
- Always pay attention to the safety instructions provided on each label affixed to the instrument and do not alter or remove the labels. When inspecting the instrument, ensure that the safety labels have not become worn or damaged.
- The ASAP 2460 sound level is below 80 dBA. Hearing protection is optional.
- The ASAP 2460 has a safety shield. Ensure it is in place when operating the instrument.
- Proper maintenance is critical to personnel safety and smooth instrument operation and performance. Instruments require regular maintenance to help promote safety, provide an optimum end test result, and to prevent costly down time. Failure to practice proper maintenance procedures can lead to unsafe conditions and shorten the life of the instrument.
- Improper handling, disposing of, or transporting potentially hazardous materials can cause serious bodily harm or damage to the instrument. Always refer to the SDS when handling hazardous materials. Safe operation and handling of the instrument, supplies, and accessories are the responsibility of the operator.

INTENDED USE

The ASAP 2460 Surface Area and Porosimetry Analyzer incorporates a unique expandable system designed for high performance and high sample throughput. The base ASAP 2460 is a two-port master control unit. For more throughput, additional two-port auxiliary units can be connected to the master unit expanding the system to either a four-port or six-port analyzer.

The instrument was designed for non-biohazardous samples only.

The instrument is intended to be operated by trained personnel familiar with the proper operation of the equipment recommended by the manufacturer and as well as relevant hazards involved and prevention methods. Other than what is described in this manual, all use is seen as unintended use and can cause a safety hazard.

The instrument is intended to be used as per applicable local and national regulations.

TRAINING

It is the customer's responsibility to ensure that all personnel operating or maintaining the equipment participate in training and instruction sessions. All personnel operating, inspecting, servicing, or cleaning this instrument must be properly trained in operation and machine safety before operating this instrument.

Environmentally Friendly Use Period

Hazardous Substances Table

Part Name	Hazardous Substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Cover	o	o	o	o	o	o
Power Supplies	x	o	o	o	o	o
Printed Circuit Boards	x	o	o	o	o	o
Cables, Connectors & Transducers	x	o	o	o	o	o

o Hazardous substance is below the specified limits as described in SJ/T11363-2006.

x Hazardous substance is above the specified limits as described in SJ/T11363-2006.

The Environmentally Friendly Use Period (EFUP) for all enclosed products and their parts are per the symbol shown here unless otherwise marked. Certain parts may have a different EFUP (for example, battery modules) and are marked to reflect such. The Environmentally Friendly Use Period is valid only when the product is operated under the conditions defined in the product manual.

SYMBOLS THAT MAY APPEAR ON THE INSTRUMENT

The following symbols or icons indicate safety precautions and/or supplemental information and may appear on your instrument:

Use extreme caution when working on the instrument where one of these symbols may be displayed. These symbols indicate the part may be hot and cause serious burns.

Use the cotton gloves provided in the accessory kit when handling heated surfaces. These cotton gloves are not intended to protect hands when heated surfaces are above 60 °C.

When working on an instrument where this symbol is displayed, refer to the corresponding Operator Manual for additional information.

When this symbol is displayed, toxic or flammable gases require proper venting of exhaust.

This symbol can also indicate the instrument uses mercury which is an extremely toxic substance. Read the Safety Data Sheet (SDS) and be aware of the hazards of mercury and know what to do in the event of a spill or an exposure incident.

This page
intentionally
left blank

micromeritics®

Table of Contents

1 PRE-INSTALLATION DOCUMENT OVERVIEW

This document describes how to prepare a site for installation of the ASAP 2460 for both standard and 21 CFR Part 11 (Confirm) environments. 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 *Dates and Signatures — All Environments on page 6 - 1*. If unsure about any part of this document or the checklist, contact the Micromeritics Service Department for clarification.

The following chart indicates the applicable sections for your type of installation:

Section	Installation Type	
	Std	CFR
Pre-installation Document Overview above.	✓	✓
Pre-installation Instructions — All Environments on page 2 - 1. Contains questions and a checklist for the installation site.	✓	✓
Pre-installation Checklists — All Environments on page 3 - 1. Contains questions and a checklist for the installation site.	✓	✓
Pre-installation Instructions — 21CFR11 Environments on page 4 - 1. Contains information to help analyze the installation site for 21 CFR Part 11 environments.		✓
Pre-installation Checklist — 21CFR11 Environments on page 5 - 1. Contains questions and a checklist for the installation site for 21 CFR Part 11 environments.		✓
Dates and Signatures — All Environments on page 6 - 1. For use when Micromeritics will be performing this installation. Read this entire document carefully. Complete all checklists. Sign and return the form in this section to Micromeritics. Micromeritics will contact you to confirm an installation date.	✓	✓

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 - 5*.

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 - 6* 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 *Dates and Signatures — All Environments on page 6 - 1* to Micromeritics. Micromeritics will contact you to confirm an installation date.

2 Pre-installation Instructions — All Environments

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

A unobstructed lab work space that will accommodate the following specifications is needed:

Master module

Height	94 cm (37 in.)
Width	38 cm (15 in.)
Depth	59 cm (23 in.)
Weight	54 kg (119 lbs.)

Auxiliary module

Height	94 cm (37 in.)
Width	38 cm (15 in.)
Depth	39.5 cm (15.5 in.)
Weight	29 kg (64 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.

Degas Unit (optional accessory)

Width	50 cm (20 in.) Approx.
Depth	40 cm (16 in.) Approx.

INSTALLATION CONFIGURATION

Standard installation requires the use of 1/8 in. copper or stainless steel gas supply lines, located in the instrument accessories kit. A nonstandard installation will be created if another gas supply line is used or if the gas cylinders cannot be placed within 6 ft (2 m) of the analyzer. There may be additional costs associated with a nonstandard installation. Please contact the Micromeritics Service Department at 1-770-662-3636 to discuss a nonstandard installation.

COMPUTER SYSTEM

We recommend purchasing the computer system from Micromeritics. Micromeritics thoroughly tests operating systems with the Micromeritics applications and offer technical support and maintenance for the computers we provide. For analyzers not installed by Micromeritics, please note:

- The labor and expense costs associated with delays traceable to a computer system not purchased from Micromeritics are not part of a standard installation.
- Micromeritics is not responsible for providing assistance for the connection to a company network or LIMS.
- During installation, Administrator rights will be required to make changes to the Ethernet settings. If access cannot be granted to the Service Technician, an IT representative must be readily available to make these changes or additional charges may apply.

Computer Requirements

Operating System	Windows 10 or higher operating system is required.
Desktop Installation Required	The application should not be installed on a network drive with shared access. Multiple users cannot operate the application at the same time.  Ensure the "Sleep" setting on the desktop is set to "Never" to avoid interruption while running an analysis. If this occurs, the application loses network connectivity with the instrument and a communications error will be reported. A restart of the Windows application may be required if automatic reconnection is not successful.

Computer Requirements (continued)

10 Base T or 100 Base T Ethernet Port	If the computer is to be connected to a network, two Ethernet ports are required. If more than one Ethernet-based unit is connected to the same computer, an Ethernet switch will also be required. If a Smart VacPrep is to be used, an Ethernet switch is required.
Read/Write Permissions	All application users will need Read/Write permission to all directories and subdirectories where the application is installed. For 21 CFR Part 11 environments, permission may be limited to the installation directory.
Drives	USB port

Due to continuous improvements, specifications are subject to change without notice.

ENVIRONMENTAL FACTORS

POWER

The ASAP 2460 is designed to operate with 100-240 Vac at 50-60 Hz. Noise-free power of the correct voltage and frequency, with a safety earth ground, should be available through a standard wall receptacle. These requirements can be checked by using a circuit analyzer or a multimeter.

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 30 °C operating, stable within ± 3 °C; -10 to 55 °C non-operating
Humidity: Up to 90%, 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 SUPPLY

GAS CYLINDERS AND GAS SUPPLY LINES

- See *Gas for Analyzer Test on page 2 - 10* for the analytical gases needed during installation. Gas cylinders must be placed within 6 ft (2 m) of the analyzer inlet valves
- It is required that the 1/8 in. × 6 ft (2 m) single piece copper gas line in the analyzer accessories kit is used. Stainless steel gas lines are available from Micromeritics for use with gases that are not compatible with copper.

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

Gas supply lines made of materials other than copper or stainless steel may cause operational problems.

- **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. Use of other gas lines will result in a nonstandard installation. See *Installation Configuration on page 2 - 3*.
- **Do not** use gas purifiers; they can cause operational problems. Oxygen traps are preferred.

GAS SUPPLY HARDWARE

Micromeritics recommends the gas regulators to be used with the analyzer be purchased from Micromeritics. The regulators Micromeritics provides have been carefully evaluated and tested to provide superior performance.

If purchased from a source other than Micromeritics, please keep in mind that many commercially available gas regulators lack key features which are required for gas adsorption measurements. These vital criteria must be met:

- **Cleanliness**. Clean regulators designed specifically for high-vacuum service are required. Other regulators often contain elastomeric material or oils which can contaminate the gas.
- **High stability**. Excess pressure at the gas inlet ports to the analyzer can interfere with accurate gas dosing and flow rates. The combined change in the outlet pressure from the gas regulator, as the gas cylinder pressure decreases or as the flow rate stops, should not change more than 5 psig (34.4 kPag) from the selected setting. When the analyzer is idle for an extended period of time, such as 8 to 10 hours, this same stability of gas delivery pressures should be achieved.
- **Range of pressure.** The regulator output must operate from 0 to 30 psig (207 kPag).
- **Suitable sub-assemblies.** The regulator must have a shutoff or outlet isolation valve compatible with 1/8 in. or 1/4 in. Swagelok compression fittings.

To purchase regulators from Micromeritics, contact your local Micromeritics Sales Representative.

Regulator Expansion Kits

It is sometimes beneficial to attach more than one analyzer, and/or accessory device, or different inlet ports to a single gas supply. Any time this is done, it is critically important that there be a means of isolating, or shutting-off, each device attached to the gas supply regulator. Micromeritics recommends the use of a vacuum rated shutoff/isolation valve for this purpose.

This shutoff/isolation valve is required in order to prevent problems when changing gas cylinders or servicing any of the devices attached to the gas supply.

If the need to attach more than one inlet or one analyzer and/or accessory device is anticipated, one or more of the following regulator expansion kits must be acquired:

Regulator Expansion Kits

Part Number	Description
004-33601-00	Regulator Expansion Kit (2 outlet, 1000 psi maximum). This kit contains one T fitting, two vacuum rated shutoff valves, and other necessary hardware. This expansion kit allows gas to be provided to two inlets.
004-33601-01	Regulator Expansion Kit (3 outlet, 1000 psi maximum). This kit contains one cross fitting, three vacuum rated shutoff valves, and other necessary hardware. This expansion kit allows gas to be provided to three inlets.

LABORATORY EQUIPMENT AND SUPPLIES

LIQUID NITROGEN

Ensure liquid nitrogen is available in sufficient quantities. A minimum of 36 liters is required for starting an analysis.

- For installation, there **must** be an adequate supply of liquid nitrogen. At least 3 liters per analysis Dewar is required.
- **Do not** use liquid nitrogen that is either blue (a sign of oxygen contamination) or not clear.

ANALYSIS EQUIPMENT AND SUPPLIES

Since the analysis results are expressed in units of surface area per gram of sample, the true mass of the sample must be known. This requires an analytical balance with the capability of 100 grams measurement and 0.1 mg readability.

In order to obtain accurate analysis results, the sample tubes must be clean. The following items are suggested for cleaning sample tubes:

- Alconox or similar laboratory detergent
- Balance for weighing sample
- Brush
- Clean, dry compressed air or dry nitrogen
- Drying oven
- Isopropyl alcohol
- Sink
- Small plastic tub for detergent solution
- Ultrasonic bath

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.

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

All gases require the indicated purity.

- A quality gas typically used in your environment.

(CGA 580) N_2	99.999%
(CGA 580) He	99.999%
(CGA 580) Kr	99.995% (required for krypton units only)

Any additional gases that may be used after the installation is complete can be connected by the Micromeritics representative.

3 Pre-installation Checklists — All Environments

For each question, circle **Y** if the condition applies to your laboratory or **N** if it does not. When this *Pre-installation Checklist* has been completed, see *Dates and Signatures — All Environments on page 6 - 1*. Sign and date the form, then send it along with all completed checklists to Micromeritics.

Unpacking and Inspection Checklist

Unpacking and Inspection			Initial / Date
Have the shipping cartons been unpacked and their contents inspected?	**Y**	**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?	**Y**	**N**	
Was an Ethernet switch purchased with the analyzer or is there one available, if needed?	**Y**	**N**	

Analyzer Space Checklist

Analyzer Space			Initial / Date
Can the lab area where the analyzer and computer will be placed accommodate the combined dimensions of the analyzer, accessories, computer, and printer?	**Y**	**N**	
Can the lab area where the analyzer and computer will be placed accommodate the combined dimensions of the analyzer and any accessories, peripheral devices (such as a printer), or computer (when applicable)?	**Y**	**N**	
Will there be adequate space to easily access the gas lines, power supply lines, and sufficient clearance for maintenance and inspection?	**Y**	**N**	

INSTALLATION CONFIGURATION CHECKLIST

Gas and Gas Supply Lines			Initial / Date
Will 1/8 in. copper gas supply lines (supplied with the analyzer for standard installation) be used?	**Y**	**N**	
■ If **No**, have 1/8 in. stainless steel gas supply lines been ordered and received from Micromeritics?	**Y**	**N**	

ENVIRONMENTAL FACTORS CHECKLIST

Environmental Factors			Initial / Date
Is power available with the correct voltage and frequency, and a safety earth ground?	**Y**	**N**	
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?	**Y**	**N**	
■ If **Yes**, please explain:			

GAS SUPPLY CHECKLIST

Gas Supply			Initial / Date
Are gas cylinders located within 6 ft (2 m) of where the instrument will be installed?	**Y**	**N**	
Were gas regulators purchased from Micromeritics?	**Y**	**N**	
■ If **No**, do your gas regulators meet Micromeritics' specifications?	**Y**	**N**	

Required Gases				Initial / Date
Are the following **required** gases available? The installation will not be scheduled until these gases are available:				
(CGA 580) N_2	99.999%	**Y**	**N**	
(CGA 580) He	99.999%	**Y**	**N**	
(CGA 580) Kr	99.995% for Krypton units only)	**Y**	**N**	

Additional Gases	
Additional gases for use after installation can be connected by the Micromeritics service representative. Please list any gases that will be available for connection during installation.	
Initial / Date	

COMPUTER SYSTEM CHECKLIST

			Initial / Date
Was the computer purchased from Micromeritics?	**Y**	**N**	
■ If **No**, does the computer meet Micromeritics' minimum requirements?	**Y**	**N**	
Will the computer be connected to the local network?	**Y**	**N**	
■ If **Yes**, will two Ethernet ports be available during the installation?	**Y**	**N**	
Will there be more than one Micromeritics Ethernet based analyzers connected to this computer?	**Y**	**N**	
■ If **Yes**, will an Ethernet switch be available during the installation?	**Y**	**N**	
Will the Micromeritics Service Engineer have Administrator rights to the computer?	**Y**	**N**	
■ If **No**, will an IT representative be available?	**Y**	**N**	
All application users are required to have read/write permission to all directories and subdirectories where the application is installed. Will these permissions be set prior to installation?	**Y**	**N**	

Laboratory Equipment and Supplies Checklist

Laboratory Equipment and Supplies			Initial / Date
Are sufficient quantities of liquid nitrogen available?	**Y**	**N**	
Are sufficient quantities of isopropyl alcohol available?	**Y**	**N**	
Is a balance available for weighing samples?	**Y**	**N**	
Is a drying oven or sample degasser available?	**Y**	**N**	

Application Related Issues Checklist

Application Related Issues			Initial / Date
What types of samples will be tested?			
Initial / Date:			
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:		
Initial / Date:		

4 PRE-INSTALLATION INSTRUCTIONS — 21CFR11 ENVIRONMENTS

Use the *Users and Groups Worksheet for 21CFR11 on page 5 - 3* to log user names and assigned groups.

The Confirm application uses Windows Users and Groups to control access to the Micromeritics Confirm application. When the Micromeritics Confirm application is installed, two Confirm groups are created. Confirm users must be assigned to only one group.

If the computer will be connected to a LAN, the network/Windows administrator must be available to install the network connection. Also, if the analyzer files need to be accessible to a LIMS, file location will need to be discussed during installation.

Confirm User Name	Description
mic_[*analyzer model number*]_controller	mic_[*analyzer model number*]_controller is the user name used by all installations. ■ This user should have complete control over the installation directory. ■ The application is launched under this user name and has this user's privileges to the windows file system. ■ This user should not be used by anyone or any other software that is not a Micromeritics application. ■ The system administrator has the option of modifying this account so that the password never expires. Alternatively, if the password does expire while the application is running, the application automatically changes the password for this account.

Confirm Group Name	Description
Developer Group	The default Developer group name is *mic_[analyzer model number]_developer*. Members of the Developer group: ■ have rights to all functions of the Micromeritics application - including Advanced option presentation which allows the creation and modification of methods, sample files, and parameter files. ■ can run an analysis. ■ can also be assigned Administrator rights which control the user profiles.
Analyst Group	The default Analyst group name is *mic_[analyzer model number]_analyst*. Members of the Analyst group: ■ have access to the *Basic* presentation option only. ■ may create sample files from pre-defined methods and can modify only a limited number of input fields.

User Permissions within the Application

Function	Developer	Analyst
Create methods	✓	
Create or modify sample files and parameter files	✓	
Create or modify sample files and parameter files only from the available method and parameter file		✓
Run analyses	✓	✓
Generate reports	✓	✓
List and print sample files	✓	✓
Perform routine maintenance	✓	✓
Enable manual control	✓	✓
Change limited analysis conditions prior to performing an analysis	✓	✓
Change report options after analysis	✓	✓
Access to the Advanced option presentation	✓	
Access to the Basic option presentation	✓	✓
Access to directories outside of the installation directory and data directory	✓*	✓*
Can overwrite, rename, or delete existing files in the data directory	✓*	✓*
Can perform diagnostics	✓	✓
Can perform calibration	✓	
Can view and print the system audit trail	✓	✓
Can manage libraries	✓	✓
Can change system units and gas selections	✓	✓
Can add log entries	✓	✓

* With administrative privileges only.

This page
intentionally
left blank

5 PRE-INSTALLATION CHECKLIST — 21CFR11 ENVIRONMENTS

For each question, circle **Y** if the condition applies to your laboratory or **N** if it does not. When this *Pre-installation Checklist* has been completed, see *Dates and Signatures — All Environments on page 6 - 1*. Sign and date the form, then send it to Micromeritics.

PERSONNEL REQUIREMENTS

Network Administrator			**Initial / Date**
Name: _____			
Will the computer be connected to a LAN? If **Yes**, does the network administrator have the ability to:	**Y**	**N**	
■ connect the computer to a network?	**Y**	**N**	
■ correct network connection problems?	**Y**	**N**	
■ set necessary network drive and directory access?	**Y**	**N**	
Will the analyzer need to be accessible to a laboratory information application? If **Yes**:	**Y**	**N**	
■ does the application administrator have the necessary file permissions?	**Y**	**N**	
■ will the network administrator be available during installation?	**Y**	**N**	

Confirm Administrator			**Initial / Date**
Name: _____			
Will the Confirm Administrator:			
■ have administrative privileges?	**Y**	**N**	
■ have a basic understanding of Windows groups and Windows users?	**Y**	**N**	
■ be available during installation?	**Y**	**N**	

Software User			Initial / Date
Name: _____			
Will the software user:			
■ have the ability to create and manage Windows users and groups?	**Y**	**N**	
■ have Windows Administrator access?	**Y**	**N**	
■ be available the first and last day of installation?	**Y**	**N**	

USER INFORMATION REQUIREMENTS

Function			Initial / Date
Has the ***Users and Groups Worksheet for 21CFR11 on the facing page*** been completed?	**Y**	**N**	

USERS AND GROUPS WORKSHEET FOR 21CFR11

Micromeritics Confirm application: ______________________		Developer	Analyst
User Name Full Name	______________________ ______________________	☐	☐
User Name Full Name	______________________ ______________________	☐	☐
User Name Full Name	______________________ ______________________	☐	☐
User Name Full Name	______________________ ______________________	☐	☐
User Name Full Name	______________________ ______________________	☐	☐
User Name Full Name	______________________ ______________________	☐	☐
User Name Full Name	______________________ ______________________	☐	☐
User Name Full Name	______________________ ______________________	☐	☐
User Name Full Name	______________________ ______________________	☐	☐

This page
intentionally
left blank

6 DATES AND SIGNATURES — ALL ENVIRONMENTS

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 Representative also the End User? **Yes** _____ **No** _____

RETURN THE COMPLETED CHECKLIST AND FORMS TO:

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

Email: Service.Helpdesk@Micromeritics.com

micromeritics®

UK DECLARATION OF CONFORMITY

This declaration of conformity is issued under the sole responsibility of the manufacturer:

Micromeritics Instrument Corporation
4356 Communications Drive
Norcross, GA 30093, USA

Hereby declares that the product:

ASAP 2460 Gas Adsorption Analyzer (all configurations, with or without Auxiliary Analysis Modules)

is in conformity with the following UK legislation:
Electrical Equipment (Safety) Regulations 2016
Electromagnetic Compatibility Regulations 2016
Restriction of the Use of Certain Hazardous Substances in E&E Equipment Regulations 2012

and that the equipment is in conformity with the following designated and other appropriate standards;

Electrical Equipment (Safety) Regulations 2016
IEC 61010-1:2010/AMD1:2016 - *Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements.*
IEC 61010-2-081:2019 – *Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes.*

Electromagnetic Compatibility Regulations 2016
IEC 61326-1:2020 - *Electrical equipment for measurement, control and laboratory use — EMC requirements — Part 1: General requirements*
IEC 61000-3-2:2019 - *Part 3-2: Limits — Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)*
IEC 61000-3-3:2013 - *Part 3-3: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <= 16 A per phase and not subject to conditional connection*

Restriction of the Use of Certain Hazardous Substances in E&E Equipment Regulations 2012
EN 63000:2018 - *Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances*

Name: John McCaffrey, Ph.D.

Title: Vice President, R & D

Signature:

Date of issue: 12/10/2023

Location: Norcross, GA USA

micromeritics®

EU DECLARATION OF CONFORMITY

This declaration of conformity is issued under the sole responsibility of the manufacturer:

Micromeritics Instrument Corporation
4356 Communications Drive
Norcross, GA 30093, USA

Hereby declares that the product:

ASAP 2460 Gas Adsorption Analyzer (all configurations, with or without Auxiliary Analysis Modules)

is in conformity with the following **EU harmonization legislation**:

2014/35/EU - LVD Directive
2014/30/EU - EMC Directive
2011/65/EU - RoHS Directive

and that the equipment is in conformity with the following harmonized and other appropriate standards;

2014/35/EU (LVD)
IEC 61010-1:2010/AMD:2016 - *Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements.*
IEC 61010-2-081:2019 – *Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes.*

2014/30/EU (EMC)
IEC 61326-1:2020 Ed.3 - *Electrical equipment for measurement, control and laboratory use — EMC requirements — Part 1: General requirements*
IEC 61000-3-2:2018 /AMD1:2020 - *Part 3-2: Limits — Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)*
IEC 61000-3-3:2013 - *Part 3-3: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <= 16 A per phase and not subject to conditional connection*

2011/65/EU (RoHS)
EN 63000:2018 - *Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances*

Name: John McCaffrey, Ph.D.

Title: Vice President, R & D

Signature: _____

Date of issue: 12/15/2023

Location: Norcross, GA USA