

AccuPyc[®] III

GAS DISPLACEMENT PYCNOMETER



This Operator Training Checklist was reviewed and approved by:

Quality Control

Product Management

Global Service

Technical Director

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OPERATOR TRAINING CHECKLIST

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(Rev -)

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.

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DOCUMENT REVISION HISTORY

REV	ECN #	Description of Change	Checked By	Date
-	230001	Formal Release	M. Austin	1/22/2024

1. OVERVIEW

This document contains a checklist to be used for training of AccuPyc III system operators in standard and 21 CFR Part 11 (Confirm) environments (if applicable). In each of the sections, place a check mark next to the items that were shown and discussed.

Sections	Standard Users
<u>Orientation on the next page</u>	
<u>Software Users on page 3</u>	
<u>Troubleshooting and Maintenance on page 5</u>	
<u>Returned Goods and Parts Ordering on page 5</u>	
<u>Warranty Statement on page 5</u>	
<u>Questions on page 6</u>	
<u>Verification on page 7</u>	

2. ORIENTATION

ALL USERS

- _____ 1. General safety
- _____ 2. Operator Manual table of contents and appendices
- _____ 3. Manual organization and conventions
- _____ 4. Equipment description
- _____ 5. Power up and power down sequence
- _____ 6. Instrument and cable connections
- _____ 7. Gas connections
- _____ 8. Purging of gas lines
- _____ 9. Front and rear panel components
- _____ 10. Sample chamber
- _____ 11. Regulator setting
- _____ 12. Calculations and error messages document location

SOFTWARE APPLICATION

- _____ 1. Menu structure
- _____ 2. Software usage topics
- _____ 3. Trainee allowed time to become familiar with software application
- _____ 4. Online operator manual

3. SOFTWARE USERS

ANALYSIS PREPARATION

- _____ 1. Prepare and load a sample
- _____ 2. Trainee prepared a sample

INSERTS MENU

- _____ 1. Creating cup and multivolume insert files
- _____ 2. Measure sample cup
- _____ 3. Measure multivolume insert

SAMPLE ANALYSIS

- _____ 1. Start analysis
- _____ 2. Analysis Methods (FoamPyc only)
- _____ 3. Review analysis
- _____ 4. Calculations

ANALYSIS RECORDS

- _____ 1. Change sample file report options
- _____ 2. Screen and printed reports
- _____ 3. Example reports
- _____ 4. Calculations

CHAMBER MENU

- _____ 1. Reference verification
- _____ 2. Leak test
- _____ 3. Purging gas line
- _____ 4. Previous calibration information

OPTIONS MENU

- _____ 1. Units selection
- _____ 2. Graph grid lines
- _____ 3. Parameter files directory

COMMUNICATIONS MENU

- _____ 1. Connecting to Lab network
- _____ 2. Connecting to MIC network
- _____ 3. Using Wi-Fi
- _____ 4. Exporting data over network
- _____ 5. Connecting to a network printer
- _____ 6. Connecting a Legacy instrument

4. TROUBLESHOOTING AND MAINTENANCE

- _____ 1. Troubleshooting
- _____ 2. Error messages (Refer to the AccuPyc III Operator Manual.)
- _____ 3. Preventive maintenance procedures (Refer to Instrument Operators Manual.)
- _____ 4. Gas line connection
- _____ 5. Instrument calibration
- _____ 6. Chamber cap O-ring
- _____ 7. Check the cell and expansion chamber for leaks
- _____ 8. Perform leak test.
- _____ 9. Clean the equipment
- _____ 10. Recover from a power failure

5. RETURNED GOODS AND PARTS ORDERING

- _____ 1. Returned goods policy
- _____ 2. Parts and accessories

6. WARRANTY STATEMENT

- _____ 1. Warranty policy

8. VERIFICATION

_____ All items on the Operator Training Checklist completed? (Enter **Yes** or **No**)

Name of trainer: _____

Date of training: _____

Company address: _____

Analyzer name: _____

Analyzer serial number: _____

The following section is to be completed by the primary operator trained during this session.
Please complete to acknowledge that installation training has been carried out to your satisfaction.

Operator verifying completion of training: _____

Date signed: _____

Operator's title: _____

Operator's phone number: _____



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:

AccuPyc III Automatic Gas Pycnometer

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.*

EN 61010-2-010:2019 - *Particular requirements for laboratory equipment for the heating of materials.*

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)*

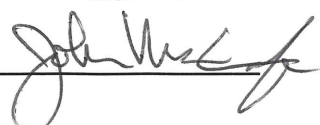
IEC 61000-3-3:2013 - *Part 3-3: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection*

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: **05/19/2023**

Location: **Norcross, GA USA**



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:

AccuPyc III Automatic Gas Pycnometer

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.*

EN 61010-2-010:2019 - *Particular requirements for laboratory equipment for the heating of materials.*

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: _____

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