

# **GEOPYC<sup>®</sup> 1365**

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**ENVELOPE DENSITY ANALYZER**



This Operator Training Checklist was reviewed and approved by:

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Quality Control

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Product Management

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Global Service

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Technical Director

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## ***OPERATOR TRAINING CHECKLIST***

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136-42875-03  
Apr 2023  
(Rev B)

## ***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, 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](http://www.Micromeritics.com).

## DOCUMENT REVISION HISTORY

REV	ECN #	Description of Change	Checked By	Date
-	160002	Formal Release	M. Austin	12/12/2016
A	170084	Added T.A.P. support	M. Austin	03/29/2017
B	220280	Revised per portfolio review		

## ***CONTACT Us***

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### **Micromeritics Instrument Corporation**

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[www.Micromeritics.com](http://www.Micromeritics.com)

### **Instrument Service or Repair**

Phone: 1-770-662-3666  
International: Contact your local distributor or call 1-770-662-3666  
[Service.Helpdesk@Micromeritics.com](mailto:Service.Helpdesk@Micromeritics.com)

### **Micromeritics Application Support**

[Support@Micromeritics.com](mailto:Support@Micromeritics.com)

## 1. OVERVIEW

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All references to GeoPyc or GeoPyc 1365 in this document encompass the GeoPyc 1365 and GeoPyc 1365 T.A.P. unless otherwise noted.

This document contains a checklist to be used for training of GeoPyc 1365 system operators. Place a check mark next to the items that were shown and discussed.

## 2. ORIENTATION

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- ☐ 1. General safety
- ☐ 2. Operator Manual organization and conventions
- ☐ 3. Equipment description
- ☐ 4. Discussion of the T.A.P. option
- ☐ 5. Power up and power down
- ☐ 6. Standby mode
- ☐ 7. Instrument and cable connections
- ☐ 8. Front and rear panel components
- ☐ 9. Sample chamber
- ☐ 10. Menu structure
- ☐ 11. Software usage topics
- ☐ 12. Trainee allowed time to become familiar with software application

## 3. SOP

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- ☐ 1. SOP defined and discussed
- ☐ 2. Review Records created after analysis
- ☐ 3. Review Reports after analysis

## **4. DRY FLO MEDIUM**

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- \_\_\_\_\_ 1. Handling Dry Flo discussion
- \_\_\_\_\_ 2. Amount of Dry Flo to use
- \_\_\_\_\_ 3. Load chamber with Dry Flo demonstration and discussion

## **5. ANALYSIS CHAMBER AND PLUNGER**

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- \_\_\_\_\_ 1. Components
- \_\_\_\_\_ 2. Usage
- \_\_\_\_\_ 3. Maintenance and assembly
- \_\_\_\_\_ 4. Consolidation force

## **6. SAMPLE RUN**

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- \_\_\_\_\_ 1. Run types
- \_\_\_\_\_ 2. Zero depth
- \_\_\_\_\_ 3. Volume calibration
- \_\_\_\_\_ 4. Sample run
- \_\_\_\_\_ 5. Starting and viewing analyses
- \_\_\_\_\_ 6. Blank data storage
- \_\_\_\_\_ 7. Operation verification

## **7. ANALYSIS REPORTS**

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- \_\_\_\_\_ 1. Reports in *Records* view
- \_\_\_\_\_ 2. Printed reports
- \_\_\_\_\_ 3. Importing and exporting reports

## **8. *TROUBLESHOOTING AND MAINTENANCE***

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- \_\_\_\_\_ 1. Troubleshooting
- \_\_\_\_\_ 2. Error messages (Refer to Micromeritics Website,)
- \_\_\_\_\_ 3. Preventive maintenance procedures (Refer to Instrument Operators Manual.)
- \_\_\_\_\_ 4. Clean the equipment
- \_\_\_\_\_ 5. Recover from a power failure
- \_\_\_\_\_ 6. Diagnostics

## **9. *RETURNED GOODS AND PARTS ORDERING***

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- \_\_\_\_\_ 1. Returned goods policy
- \_\_\_\_\_ 2. Parts and accessories

## **10. *WARRANTY STATEMENT***

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- \_\_\_\_\_ 1. Warranty policy





## 12. VERIFICATION

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\_\_\_\_\_ 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:

\_\_\_\_\_



## 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:

**GeoPyc 1365 Envelope and Density Analyzer**

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  $\leq 16$  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  $\leq 16$  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: \_\_\_\_\_

A handwritten signature in blue ink, appearing to read 'John McCaffrey', written over a horizontal line.

Date of issue: 03/20/2023

Location: Norcross, GA USA



## 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:

**GeoPyc 1365 Envelope and Density Analyzer**

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  $\leq 16$  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  $\leq 16$  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:** 03/20/2023

**Location:** Norcross, GA USA