

SEDIGRAPH[®] III PLUS

PARTICLE SIZE ANALYSIS SYSTEM



This Operator Training Checklist was reviewed and approved by:

Senior QC Auditor

Director, Marketing

Director, Global Service

Technical Director

This document, and specifications herein, is the property of Micromeritics. Do not reproduce or use in whole or in part without the written consent of Micromeritics.

OPERATOR TRAINING CHECKLIST

512-42875-03
Aug 2021
(Rev A)

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.

DOCUMENT REVISION HISTORY

REV	ECN #	Description of Change	Checked By	Date
-	170001	Formal Release	M. Austn	02-09-2017
A	210046	Revised per portfolio review		

CONTACT US

Micromeritics Instrument Corporation

4356 Communications Drive
Norcross, GA / USA / 30093-2901
Phone: 1-770-662-3636
Fax: 1-770-662-3696
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

Micromeritics Application Support

Support@Micromeritics.com

1. OVERVIEW

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

2. ORIENTATION

- _____ 1. General safety
- _____ 2. Table of contents and appendices
- _____ 3. Manual organization and conventions
- _____ 4. Equipment description
- _____ 5. Power up and power down sequence
- _____ 6. Analyzer and cable connections
- _____ 7. MasterTech operation (if applicable)
- _____ 8. Menu structure
- _____ 9. Mouse and keyboard usage
- _____ 10. Trainee allowed time to become familiar with software operation
- _____ 11. Help menu
- _____ 12. Libraries

3. INTERLOCKS

- _____ 1. X-ray system
- _____ 2. X-ray safety

4. SEDIMENTATION THEORY AND SAMPLE DISPERSION

- _____ 1. Stokes' Law and sedimentation theory
- _____ 2. Data reduction and unreduced report appendices
- _____ 3. Sample dispersion and chemical dispersion aids

5. *SAMPLE FILE AND PARAMETER FILE CREATION*

- _____ 1. File menu and sample information file structure
- _____ 2. Sample information file
- _____ 3. Analysis conditions file
- _____ 4. Liquid properties file
- _____ 5. Report options file
- _____ 6. Available reports

6. *SAMPLE ANALYSIS*

- _____ 1. Schematics, indicators, and prompts
- _____ 2. Valves, pumps, and tubes
- _____ 3. Dispersion medium preparation
- _____ 4. Baseline analysis
- _____ 5. Reference sample preparation
- _____ 6. Baseline analysis results
- _____ 7. Sample analysis begun
- _____ 8. Full scale results
- _____ 9. Analysis views
- _____ 10. Quick Start analysis mode
- _____ 11. Repeat Schedule analysis mode
- _____ 12. MasterTech Automatic analysis mode (if applicable)
- _____ 13. MasterTech Schedule analysis mode (if applicable)
- _____ 14. SediGraph rinsed after analysis
- _____ 15. Analysis of additional sample

7. *ANALYSIS REPORTS*

- _____ 1. Starting and canceling default reports

- _____ 2. Changing sample file report options
- _____ 3. SPC reports and options
- _____ 4. Regression reports and options
- _____ 5. Control Chart reports
- _____ 6. Screen report editing and functions
- _____ 7. Printed reports
- _____ 8. Example reports

8. **OPTIONS MENU**

- _____ 1. *Options* menu
- _____ 2. Option presentation display
- _____ 3. Data presentation display
- _____ 4. Sieve size selection
- _____ 5. Sample defaults configuration
- _____ 6. Reynolds number default
- _____ 7. Autorinse options
- _____ 8. System configuration
- _____ 9. Parameter files directory
- _____ 10. Service test mode

9. **TROUBLESHOOTING AND MAINTENANCE**

- _____ 1. Troubleshooting and error messages
- _____ 2. Preventive maintenance procedures
- _____ 3. Reference material analysis details and analysis frequency
- _____ 4. Analyzer cleaning
- _____ 5. Mixture chamber and bezel cleaning
- _____ 6. Analysis cell cleaning
- _____ 7. Mixing and cell pump tubing replacement
- _____ 8. Air filter cleaning
- _____ 9. Proper operation of mixing and cell pumps
- _____ 10. Analyzer leveling
- _____ 11. Collimating slits cleaning
- _____ 12. X-ray indicator lamp replacement
- _____ 13. Cell windows replacement
- _____ 14. Cell assembly replacement
- _____ 15. Bubble source detection

- _____ 16. Mixing and cell pump resetting
- _____ 17. Ultrasonic probe tip replacement (if applicable)
- _____ 18. MasterTech input power fuse replacement (if applicable)
- _____ 19. Diagnostics

10. MASTERTECH OPERATION (IF APPLICABLE)

- _____ 1. Sample information file
- _____ 2. MasterTech baseline liquid
- _____ 3. MasterTech sample prepared
- _____ 4. MasterTech schedule
- _____ 5. MasterTech operation
- _____ 6. Additional MasterTech sample prepared

11. RETURNED GOODS AND PARTS ORDERING

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

12. WARRANTY STATEMENT

- _____ 1. Warranty policy

13. QUESTIONS

_____ All questions on operation resolved? (Enter **Yes** or **No**.)

If **No**, use the available space to document the question, then forward to the appropriate personnel at Micromeritics for resolution.

14. 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: _____