

# European Micromeritics Analytical Services

---

[www.particletesting.info](http://www.particletesting.info)

Analysis Catalog

**MICROMERITICS**  
**ANALYTICAL**  
**SERVICES**

# European Micromeritics Analytical Services

## Particle Size

### Laser Light Scattering - Mie and Fraunhofer Theories

Particle size distribution reported between 0.02 and 2000  $\mu$ . *Please supply 2 grams of material.*

- 520-00** - Aqueous-based dispersion
- 520-01** - Non aqueous-based dispersion
- 520-50** - Dry dispersion

### X-Ray Sedimentation - Stokes' Law

Particle size distribution reported between 0.1 and 300  $\mu$ . *Please supply 10 grams of material.*

- 510-00** - Aqueous and non aqueous-based dispersion

### Electrical Zone Sensing - "Coulter principle"

Particle size distribution reported between 0.5 and 1000  $\mu$ . *Please supply 2 grams of material.*

- 538-00** - Aqueous and non aqueous-based dispersion
- 538-02** - Particle Size Distribution plus particle concentration analysis
- 538-50** - Emission stack testing, particle size analysis of fly ash particles collected on filters!

### Dynamic Image Analysis

Particle Size distribution reported between 100 micrometers and 10 millimeters using a CCD camera. *Please supply 200 grams of material.*

- 540-00** - Dry dispersion only

## B.E.T. or Langmuir Surface Area

*Please supply 5 grams of dry sample material for all surface area tests*

- 005-00** - Single-point surface area using Nitrogen gas
- 005-01** - Multi point surface area using Nitrogen gas
- 005-16** - Single-point surface area using Krypton gas
- 005-02** - Multi point surface area using Krypton gas
- 005-09** - Single-point surface area using flowing gas technique (30% $\text{O}_2$ /N $_2$ /He gas blend)

## Density

*Please supply 5 grams of material if possible. Trace amounts of material may be acceptable depending on the application.*

- 133-00** - Skeletal density (Helium pycnometry)
- 133-01** - Skeletal density determined at a specified temperature (5 $^{\circ}$ C - 50 $^{\circ}$ C)
- 133-02** - Open cell content of rigid cellular plastic, foam density (ASTM method)
- 942-07** - Mercury Bulk density
- 136-00** - Envelope density of solid samples using the GeoPyc 1360
- 136-01** - T.A.P. <sup>TM</sup> (Transverse Axial Pressure) density using the GeoPyc 1360
- 136-02** - Specific pore volume and percent porosity calculations  
(Includes true density analysis and envelope density analysis)

# European Micromeritics Analytical Services

## Pore Volume Distribution / Pore Size Distribution

*Please supply 5 grams of dry sample material for all pore size samples.*

### Pore Size by Gas Adsorption

Pore size samples may include the following reports as appropriate: BET or Langmuir surface area, BJH mesopore analysis, DFT pore size calculations, single-point total pore volume, and t-Plot micropore volume.

**005-50** - 40-point Nitrogen adsorption isotherm (20 Å to 3000 Å) NEW

**005-05** - Surface area and 40-point Nitrogen desorption isotherm (20 Å to 3000 Å)

**005-08** - 40-point Nitrogen adsorption and 40-point desorption isotherm (20 Å to 3000 Å)

### Micropore Analysis

Reports may include H-K, Dubinin, and/or DFT methods for micropore analysis (Please specify adsorbate gas).

**201-03** - High-resolution micropore analysis plus mesopore isotherm (4 Å to 3000 Å)

### Pore Size by Mercury Intrusion

Report will include calculations of bulk density, skeletal density, porosity, average pore diameters, median pore diameters, and total intrusion volume. Additional summary reports such as tortuosity, fractal dimension, permeability, and compressibility are available upon request for an additional fee.

**942-03** - Mercury intrusion analysis (pore size range 360 to 0.003 micrometers)

**942-04** - Mercury intrusion and extrusion analysis (pore size range 360 to 0.003 micrometers)

**942-10** - High-resolution macropore analysis (pore size range 900 to 4 micrometers)

**942-11** - High-resolution macropore plus a complete intrusion and extrusion analysis

**942-12** - Special PoreCor™ data reduction

## Hydrogen Services

**005-60** – Hydrogen Adsorption Isotherm

## Chemisorption

*Please supply 5 grams of sample if possible. Reports may include percent dispersion and metallic surface area.*

**201-10** - Volumetric Chemisorption analysis (specify analytical method)

**291-23** - Dynamic or pulse Chemisorption analysis (specify analytical method)

**291-03** - Pulse Chemisorption using liquid vapors (specify analytical method)

### Temperature Programmed Studies

**291-01** - Temperature-Programmed Reduction (TPR)

**291-10** - Temperature-Programmed Desorption (TPD)

**291-02** - Temperature-Programmed Oxidation (TPO)

### Other Chemisorption Experiments

**291-20** - Heat of Desorption, First Order Kinetics

**201-50** - Isothermic Heat of Adsorption

# European Micromeritics Analytical Services

## Additional Information

**Ordering:** Please use the sample submission form and include billing address information. Orders are invoiced for prices in effect at the time the order is received. Payment terms are net 30 days.

**Sample / Report Retention:** Samples can be returned if all information and labeling are provided to permit shipment within the postal requirements. Samples not returned are typically retained for 30 days. Analysis reports are generally retained for three years.

**Sample submission:** A *Material Safety Data Sheet* (MSDS) is required for each different product submitted. Any hazards must be detailed to protect laboratory personnel and equipment. Withholding hazard information can result in special handling charges. Radioactive materials, and samples requiring special handling, for which the laboratory is not equipped cannot be accepted. Hazardous materials are returned to the customer for disposal. There is a surcharge of 25% for all samples classified by the Drug Enforcement Administration (DEA) as controlled substances.

**Volume Order Discounts:**

For sample quantities submitted in a single shipment:

1 to 5 samples	List Price
6 to 10 samples	5% discount
11 to 20 samples	10% discount
21 to 40 samples	15% discount
More than 40 samples	20% discount

Discount is applicable for the same type of analysis on multiple samples. Different types of analyses [i.e. different analysis part numbers] cannot be combined for volume discount.

**Sample Turnaround:** This is subject to the type of analysis required but in general,

**Normal** turnaround is typically 5-10 working days after the European Micromeritics Analytical Services receive your sample.

**Priority** turnaround (50% surcharge) is within four working days.

**Rush** turnaround (200% surcharge) places samples ahead of waiting analyses, however, analyses in progress are not interrupted.

**Instrument Purchase Allowance:** Half of the cost of applicable analyses completed, and paid for, within 120 days of instrument purchase may be credited towards the instrument purchase. Applicable analyses are those relevant to the instrument being purchased. The maximum credit allowed is 4% of the instrument purchase price. Customer must notify Micromeritics of credit due when instrument is ordered, including Micromeritics' reference numbers for applicable laboratory work.

Prices effective October 1st, 2006. Prices subject to change without notice.

## European Micromeritics Analysis Service

Erfststrasse 54 - 41238 Mönchengladbach-Germany  
Phone (+49) 2166-98708-0 · Fax (+49) 2166-98708-88  
Internet Web Site: [www.particletesting.info](http://www.particletesting.info)  
e-mail: [labmaster@particletesting.info](mailto:labmaster@particletesting.info)