



POROUS MATERIALS, INC.

ANALYTICAL TESTING SERVICES

(PRICES CURRENT AS OF JANUARY 2017)

At PMI Analytical Testing Services, we are committed to helping you obtain the pore structure information you need. Because there are multiple techniques and instruments, it is critical at the onset to identify the appropriate method of measurement. We begin by discussing your application with you, learn the results you need to obtain, and then recommend a specific test or combination of tests that will provide the most comprehensive results.

While PMI provides you with a detailed report, our application engineers are always available to discuss and help interpret your results.

PMI's Analytical Testing Services Division can accommodate a wide variety of samples, materials, and shapes. Sample size and consistency requirements vary with the test and material to be analyzed. For a large number of samples, special test conditions, or individual assistance, please contact PMI.

We can analyze your samples and return your results to you (hard copy, on a disk, email, fax, or USPS) in as little as 1-2 business days

Porous Materials, Inc. - 20 Dutch Mill Road - Ithaca, NY 14850 USA

Toll Free - US & Canada: 1-800-TALK-PMI

Telephone: (607) 257-5544

Fax: (607) 257-5639

Email: support@pmiapp.com

TESTING PRICES

Mercury Porosimetry

| | |
|--|----------|
| T101 Pore Volume, Pore Size Distribution, & Surface Area | \$275 |
| T102 Hysteresis | add \$30 |
| T103 Bulk & Absolute Density | add \$70 |
| T104 Particle Size Distribution | add \$85 |
| T105 Compressed Sample Porosimetry | \$310 |

Aquapore/ Organopore: (Non-Wetting/ Non-Mercury Porosimetry)

| | |
|---|----------|
| T201 Pore Volume, Pore Size, & Surface Area | \$310 |
| T202 Hysteresis | add \$70 |
| T203 Compressed Sample Porosimetry | \$400 |

Pycnometry

| | |
|--------------------------------|------|
| T301 Bulk Density (Mercury) | \$75 |
| T302 Absolute Density (Helium) | \$85 |

BET Analysis: Surface Area

| | |
|---|-------|
| T401 Single Point Surface Area - Nitrogen | \$110 |
| T402 Single Point Surface Area - Krypton | \$135 |
| T403 Multi-Point Surface Area - Nitrogen | \$160 |
| T404 Multi-Point Surface Area - Krypton | \$190 |

Gas Adsorption Analysis: Using Nitrogen

| | |
|--|-------|
| T410 Multi-Point Surface Area, Total Pore Volume & Average Pore Diameter (No Isotherm) | \$260 |
| T411 Complete Adsorption Isotherms (No Data Analysis) | \$315 |
| T412 Complete Desorption Isotherms (No Data Analysis) | \$315 |
| T413 Adsorption & Desorption Isotherms (No Data Analysis) | \$510 |
| T414 Multi-Point Surface Area, Adsorption & Desorption Isotherms, & Pore Distribution | \$575 |
| T415 Multi-Point Surface Area, Adsorption Isotherms, & Pore Distribution | \$390 |
| T416 Multi-Point Surface Area, Desorption Isotherms, & Pore Distribution | \$390 |
| T417 Chemisorption | \$240 |

Gas Adsorption Analysis: Using Gases OTHER than Nitrogen

| | |
|---|-------|
| T420 Adsorption or Desorption Isotherms | \$460 |
| T421 Adsorption & Desorption Isotherms | \$600 |
| T422 Specific Surface Area with Gases Other than Nitrogen & Krypton | \$205 |

Aquasorb

| | |
|-----------------------------|-------|
| T430 Water Vapor Adsorption | \$460 |
|-----------------------------|-------|

Capillary Flow Porometry

| | |
|--|-------|
| T501 Gas Permeability | \$115 |
| T501-F (Frazier) | \$115 |
| T501-C (C-522) | \$115 |
| T502 Pore Distribution & Bubble Point | \$215 |
| T503 Gas Permeability, Pore Distribution, & Bubble Point | \$235 |
| T504 Bubble Point | \$85 |
| T505 Microflow Permeability | \$190 |
| T506 Liquid Permeability | \$150 |
| T507 Hydro-Head | \$85 |
| T508 Filter Integrity | \$90 |

Capillary Flow Porometry (Continued)

| | |
|---|-----------|
| T509 Microflow Permeability, Pore Distribution, & Bubble Point | \$435 |
| T511 In-Plane Gas Permeability | \$180 |
| T512 In-Plane Flow Distribution & Bubble Point | \$275 |
| T513 In-Plane Gas Permeability, Pore Distribution, & Bubble Point | \$345 |
| T514 In-Plane Bubble Point | \$145 |
| T515 In-Plane Microflow Permeability | \$250 |
| T516 In-Plane Liquid Permeability | \$210 |
| T517 In-Plane Hydro-Head | \$145 |
| T518 In-Plane Filter Integrity | \$150 |
| T521 Hi-Flow Gas Permeability | \$190 |
| T522 Hi-Flow Gas Distribution & Bubble Point | \$290 |
| T523 Hi-Flow Permeability, Pore Distribution, & Bubble Point | \$355 |
| T524 Hi-Flow Bubble Point | \$155 |
| T525 Hi-Flow Microflow Permeability | \$260 |
| T526 Hi-Flow Liquid Permeability | \$220 |
| T527 Hi-Flow Hydro-Head | \$155 |
| T528 Hi-Flow Filter Integrity | \$160 |
| T500HT Elevated Temperature Option (Up to 180° C) | add \$115 |

Compression Porometry

| | |
|--|-------|
| T601 Gas Permeability | \$180 |
| T602 Pore Distribution & Bubble Point | \$310 |
| T603 Gas Permeability, Pore Distribution, & Bubble Point | \$345 |
| T604 Bubble Point | \$115 |
| T605 Microflow Permeability | \$255 |
| T606 Liquid Permeability | \$240 |
| T607 Hydro-Head | \$155 |
| T611 In-Plane Gas Permeability | \$240 |

Compression Porometry

| | |
|--|-------|
| T612 In-Plane Pore Distribution & Bubble Point | \$370 |
| T613 In-Plane Gas Permeability, Pore Distribution & Bubble Point | \$405 |
| T614 In-Plane Bubble Point | \$180 |
| T615 In-Plane Microflow Permeability | \$315 |
| T616 In-Plane Liquid Permeability | \$300 |
| T617 In-Plane Hydro-Head | \$180 |
| T621 Hi-Flow Gas Permeability | \$250 |
| T622 Hi-Flow Gas Distribution & Bubble Point | \$380 |
| T623 Hi-Flow Permeability, Pore Distribution, & Bubble Point | \$415 |
| T624 Hi-Flow Bubble Point | \$180 |
| T625 Hi-Flow Microflow Permeability | \$325 |
| T626 Hi-Flow Liquid Permeability | \$310 |
| T627 Hi-Flow Hydro-Head | \$190 |

Diffusion Permeability & Vapor Transmission

| | |
|--|-------|
| T701 Diffusion Permeability | \$310 |
| T702 Diffusion Permeability (High Temperature) | \$410 |
| T703 Diffusion Permeability (High Pressure) | \$350 |

Diffusion Permeability & Vapor Transmission (Continued)

| | |
|--|-----------|
| T704 Diffusion Permeability using a Mass Spectrometer | add \$220 |
| T705 Water Vapor Transmission Rate (Humidity Gradient) | \$580 |
| T706 Water Vapor Transmission Rate (Pressure Gradient) | \$295 |
| T707 Water Vapor Transmission Rate (Range of Humidity) | \$695 |
| T711 Gas Transmission (Concentrate Gradient) | \$545 |
| T712 Gas Transmission with Moisture Gradient | \$765 |
| T713 Gas Transmission with Moisture & Temperature Gradient | \$1,095 |

Envelope Surface Area, Average Particle Size, & Average Fiber Diameter

| | |
|---|-------|
| T801 Envelope Surface Area | \$110 |
| T802 Envelope Surface Area & Average Particle Size | \$180 |
| T803 Envelope Surface Area & Average Fiber Diameter | \$180 |
| T804 Average Fiber Diameter | \$110 |

Liquid Extrusion Porosimetry

| | |
|---|----------|
| T901 Through Pore Volume & Distribution | \$295 |
| T902 Hysteresis | add \$65 |
| T903 Bulk & Absolute Density | add \$70 |
| T904 Liquid Permeability | \$150 |
| T905 Pore Volume, Distribution, & Liquid Permeability | \$410 |

Liquid Extrusion Porosimetry (Continued)

| | |
|---|-----------|
| T906 Microflow Liquid Permeability | \$225 |
| T907 Effects of Compression on Pore Volume | add \$115 |
| T908 Elevated Temperature Test (Up to 200° C) | add \$115 |
| T909 Through Pore Volume & Distribution (Directional, Top to Bottom, Bottom to Top) | \$525 |
| T910 Adsorption Rate | \$295 |
| T910-VT Visual & Temperature Report | \$545 |

Capillary Condensation Flow Porometry

| | |
|---|-------|
| T1001 Pore Size Distribution Using Capillary Condensation | \$545 |
|---|-------|

Liquid-Liquid Porometry

| | |
|--|-------|
| T1102 Pore Size & Pore Distribution | \$325 |
| T1103 Microflow Liquid Permeability, Pore Size & Pore Distribution | \$435 |

Burst Pressure Test

| | |
|---|-------|
| T1201 Pore Burst Pressure Strength Test | \$105 |
|---|-------|

Rock Core

| | |
|---|-------|
| T1301 Pulse Decay Permeability | \$545 |
| T1302 Pore Burst Pressure Strength Test | \$215 |
| T1303 Pore Burst Pressure Strength Test | \$160 |

Capillary Flow Porometry

Bubble Point, Mean Flow Diameter, Pore Distribution, Hydro-Head, Micro Flow Porometry

Liquid Extrusion Porosimetry

Through Pore Volume & Liquid Permeability

Permeability

Frazier, Gurley, Rayl, Darcy, Gas Permeability, Liquid Permeability, Diffusion Permeability

Water Vapor Transmission Rate

Function of Humidity, Pressure, & Temperature.

Mercury & Non-Mercury Intrusion Porosimetry

Pore Volume, Diameter, Surface Area, Intrusion/ Extrusion, Hydrophobic/ Hydrophilic Pore

Gas Adsorption Techniques

Surface Area, Pore Volume, T-Curve, Micro Pore Analysis, Adsorption/ Desorption Isotherms, Chemisorption of Strong Chemicals, Vapor Adsorption

Pycnometry

Bulk Density, True Density

Effects of Stimulated Service Condition

Compressive Stress, Stress Cycles, Temperature, Strong Chemicals

100% credit is provided for the use of our analytical services toward equipment purchase within 6 months
[Up to a maximum of 10% of equipment cost]

TESTING REQUEST FORM

Name: _____

Company: _____

Address: _____

Phone #: _____

Email: _____

Would you like your samples returned? Yes No

Would you like a hard copy of data? Yes No

PO # or CC #: _____

Sec. Code: _____ Expiration Date: ____/____/____

Name on Credit Card: _____

Billing Phone: _____

Billing Address: _____

Requested Turnaround Time:

5 Days (+20%) 1-2 Days 1-2 Weeks

****Complete this form & mail with samples to: PMI Analytical Testing Services, 20 Dutch Mill Road, Ithaca, NY, 14850****

| | |
|---|--|
| Price: _____ Quantity: _____ Description: _____ | |
|---|--|

| | |
|--|--|
| Date Test Finished: _____ Shipping Conf. #: _____ | |
|--|--|

| | |
|---|--|
| Lot #: _____ Samples Submitted: _____ Lab: _____ Acct: _____ Shipping Date: _____ Shipping Method: _____ Priority Next-Day Email Fax | |
|---|--|

| Test | Price | Quantity |
|--|----------|----------|
| Mercury Porosimetry | | |
| <input type="checkbox"/> T101 | \$275 | _____ |
| <input type="checkbox"/> T102 | add \$30 | _____ |
| <input type="checkbox"/> T103 | add \$70 | _____ |
| <input type="checkbox"/> T104 | add \$85 | _____ |
| <input type="checkbox"/> T105 | \$310 | _____ |
| Aquapore/Organopore: Nonwetting / Non Mercury Porosimetry | | |
| <input type="checkbox"/> T201 | \$310 | _____ |
| <input type="checkbox"/> T202 | add \$70 | _____ |
| <input type="checkbox"/> T203 | \$400 | _____ |
| Pycnometer | | |
| <input type="checkbox"/> T301 | \$75 | _____ |
| <input type="checkbox"/> T302 | \$85 | _____ |
| BET Analysis: Surface Area | | |
| <input type="checkbox"/> T401 | \$110 | _____ |
| <input type="checkbox"/> T402 | \$135 | _____ |
| <input type="checkbox"/> T403 | \$160 | _____ |
| <input type="checkbox"/> T404 | \$190 | _____ |
| Gas Adsorption Analysis: Using Nitrogen | | |
| <input type="checkbox"/> T410 | \$260 | _____ |
| <input type="checkbox"/> T411 | \$315 | _____ |
| <input type="checkbox"/> T412 | \$315 | _____ |
| <input type="checkbox"/> T413 | \$510 | _____ |
| <input type="checkbox"/> T414 | \$575 | _____ |
| <input type="checkbox"/> T415 | \$390 | _____ |
| <input type="checkbox"/> T416 | \$390 | _____ |
| <input type="checkbox"/> T417 | \$240 | _____ |
| Gas Adsorption Analysis: Using Gases OTHER than Nitrogen | | |
| <input type="checkbox"/> T420 | \$460 | _____ |
| <input type="checkbox"/> T421 | \$600 | _____ |
| <input type="checkbox"/> T422 | \$205 | _____ |
| Aquasorb | | |
| <input type="checkbox"/> T430 | \$460 | _____ |
| Capillary Flow Porometry | | |
| <input type="checkbox"/> T501 | \$115 | _____ |
| <input type="checkbox"/> T501-F | \$115 | _____ |
| <input type="checkbox"/> T501-C | \$115 | _____ |
| <input type="checkbox"/> T502 | \$215 | _____ |
| <input type="checkbox"/> T503 | \$235 | _____ |
| <input type="checkbox"/> T504 | \$85 | _____ |
| <input type="checkbox"/> T505 | \$190 | _____ |
| <input type="checkbox"/> T506 | \$150 | _____ |

| Test | Price | Quantity |
|---|-----------|----------|
| Capillary Flow Porometry (Continued) | | |
| <input type="checkbox"/> T507 | \$85 | _____ |
| <input type="checkbox"/> T508 | \$90 | _____ |
| <input type="checkbox"/> T509 | \$435 | _____ |
| <input type="checkbox"/> T511 | \$180 | _____ |
| <input type="checkbox"/> T512 | \$275 | _____ |
| <input type="checkbox"/> T513 | \$345 | _____ |
| <input type="checkbox"/> T514 | \$145 | _____ |
| <input type="checkbox"/> T515 | \$250 | _____ |
| <input type="checkbox"/> T516 | \$210 | _____ |
| <input type="checkbox"/> T517 | \$145 | _____ |
| <input type="checkbox"/> T518 | \$150 | _____ |
| <input type="checkbox"/> T521 | \$190 | _____ |
| <input type="checkbox"/> T522 | \$290 | _____ |
| <input type="checkbox"/> T523 | \$355 | _____ |
| <input type="checkbox"/> T524 | \$155 | _____ |
| <input type="checkbox"/> T525 | \$260 | _____ |
| <input type="checkbox"/> T526 | \$220 | _____ |
| <input type="checkbox"/> T527 | \$155 | _____ |
| <input type="checkbox"/> T528 | \$160 | _____ |
| <input type="checkbox"/> T500HT | add \$315 | _____ |
| Compression Porometry | | |
| <input type="checkbox"/> T601 | \$180 | _____ |
| <input type="checkbox"/> T602 | \$310 | _____ |
| <input type="checkbox"/> T603 | \$345 | _____ |
| <input type="checkbox"/> T604 | \$115 | _____ |
| <input type="checkbox"/> T605 | \$255 | _____ |
| <input type="checkbox"/> T606 | \$240 | _____ |
| <input type="checkbox"/> T607 | \$115 | _____ |
| <input type="checkbox"/> T611 | \$240 | _____ |
| <input type="checkbox"/> T612 | \$370 | _____ |
| <input type="checkbox"/> T613 | \$405 | _____ |
| <input type="checkbox"/> T614 | \$180 | _____ |
| <input type="checkbox"/> T615 | \$315 | _____ |
| <input type="checkbox"/> T616 | \$300 | _____ |
| <input type="checkbox"/> T617 | \$280 | _____ |
| <input type="checkbox"/> T621 | \$250 | _____ |
| <input type="checkbox"/> T622 | \$380 | _____ |
| <input type="checkbox"/> T623 | \$415 | _____ |
| <input type="checkbox"/> T624 | \$180 | _____ |
| <input type="checkbox"/> T625 | \$325 | _____ |
| <input type="checkbox"/> T626 | \$310 | _____ |
| <input type="checkbox"/> T627 | \$190 | _____ |

| Test | Price | Quantity |
|---|-----------|----------|
| Diffusion Permeability & Vapor Transmission | | |
| <input type="checkbox"/> T701 | \$310 | _____ |
| <input type="checkbox"/> T702 | \$410 | _____ |
| <input type="checkbox"/> T703 | \$350 | _____ |
| <input type="checkbox"/> T704 | add \$220 | _____ |
| <input type="checkbox"/> T705 | \$580 | _____ |
| <input type="checkbox"/> T706 | \$295 | _____ |
| <input type="checkbox"/> T707 | \$695 | _____ |
| <input type="checkbox"/> T711 | \$545 | _____ |
| <input type="checkbox"/> T712 | \$765 | _____ |
| <input type="checkbox"/> T713 | \$1,095 | _____ |
| Envelope Surface Area Average Particle Size & Average Fiber Diameter | | |
| <input type="checkbox"/> T801 | \$110 | _____ |
| <input type="checkbox"/> T802 | \$180 | _____ |
| <input type="checkbox"/> T803 | \$180 | _____ |
| <input type="checkbox"/> T804 | \$110 | _____ |
| Liquid Extrusion Porosimetry | | |
| <input type="checkbox"/> T901 | \$295 | _____ |
| <input type="checkbox"/> T902 | add \$65 | _____ |
| <input type="checkbox"/> T903 | add \$70 | _____ |
| <input type="checkbox"/> T904 | \$150 | _____ |
| <input type="checkbox"/> T905 | \$410 | _____ |
| <input type="checkbox"/> T906 | \$225 | _____ |
| <input type="checkbox"/> T907 | add \$115 | _____ |
| <input type="checkbox"/> T908 | add \$115 | _____ |
| <input type="checkbox"/> T909 | \$525 | _____ |
| <input type="checkbox"/> T910 | \$295 | _____ |
| <input type="checkbox"/> T910-VT | \$545 | _____ |
| Capillary Condensation Flow Porometry | | |
| <input type="checkbox"/> T1001 | \$545 | _____ |
| Liquid-Liquid Porometry | | |
| <input type="checkbox"/> T1102 | \$325 | _____ |
| <input type="checkbox"/> T1103 | \$435 | _____ |
| Burst Pressure Test | | |
| <input type="checkbox"/> T1201 | \$105 | _____ |
| Rock Core Test | | |
| <input type="checkbox"/> T1301 | \$545 | _____ |
| <input type="checkbox"/> T1302 | \$215 | _____ |
| <input type="checkbox"/> T1303 | \$160 | _____ |



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 Ithaca, NY 14850 USA
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| |
|---|
| Description of Sample(s) & Additional Comments: _____ _____ _____ _____ |
|---|