



POROUS MATERIALS, INC.

ANALYTICAL TESTING SERVICES

EFFECTIVE JANUARY 2010

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 Permeametry*

Water Vapor Transmission Rate: *Function of Humidity, Pressure & Temperature*

Mercury & Non-Mercury Intrusion Porosimetry: *Pore Volume, Diameter, Surface Area, Intrusion/ Extrusion, Hydrophobic/Hydrophilic Pores*

Gas Adsorption Techniques: *Surface Area, Pore Volume, T-Curve, Micropore Analysis, Adsorption/ Desorption Isotherms, Chemisorption of Strong Chemicals, Vapor Adsorption*

Pycnometry: *Bulk Density, True Density*

Effects of Simulated Services Conditions: *Compressive Stress, Stress Cycles, Temperature, Strong Chemicals*

POROUS MATERIALS, INC.

20 DUTCH MILL RD
ITHACA, NY 14850 USA

TOLL FREE (US & CANADA): 1-800-825-5764
PHONE: 607-257-5544 FAX: 607-257-5639

INFO@PMIAPP.COM

WWW.PMIAPP.COM

ANALYTICAL SERVICES

At PMI Analytical Services, we are committed to helping you obtain the 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.

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

TESTING PRICES

Mercury Porosimetry

T101	Pore Volume, Pore Size Distribution, & Surface Area	\$205
T102	Hysteresis	add \$25
T103	Bulk & Absolute Density	add \$60
T104	Particle Size Distribution	add \$75
T105	Compressed Sample Porosimetry	\$280

Aquapore/Organopore: (nonwetting/nonmercury porosimetry)

T201	Pore Volume, Pore Size, & Surface Area	\$280
T202	Hysteresis	add \$60
T203	Compressed Sample Porosimetry	\$360

Pycnometry

T301	Bulk Density (Mercury)	\$65
T302	Absolute Density (Helium)	\$75

BET Analysis: Surface Area

T401	Single Point Surface Area - Nitrogen	\$100
T402	Single Point Surface Area - Krypton	\$120
T403	Multi-Point Surface Area - Nitrogen	\$145
T404	Multi-Point Surface Area - Krypton	\$170

Gas Adsorption Analysis: Using Nitrogen

T410	Multi Point Surface Area, Total Pore Volume, and Average Pore Diameter (no isotherm)	\$235
T411	Complete Adsorption Isotherms (no data analysis)	\$285
T412	Complete Desorption Isotherms (no data analysis)	\$285
T413	Adsorption & Desorption Isotherms (no data analysis)	\$460
T414	Multi-Point Surface Area, Adsorption & Desorption Isotherms, & Pore Distribution	\$520
T415	Multi-Point Surface Area, Adsorption Isotherms, & Pore Distribution	\$355
T416	Multi-Point Surface Area, Desorption Isotherms, & Pore Distribution	\$355
T417	Chemisorption	\$215

Gas Adsorption Analysis: Using Gases OTHER Than Nitrogen

T420	Adsorption or Desorption Isotherm	\$415
T421	Adsorption & Desorption Isotherm	\$545
T422	Specific Surface Area with Gases Other than Nitrogen & Krypton	\$185

Aquasorb

T430	Water Vapor Adsorption	\$415
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Capillary Flow Porometry

T501	Gas Permeability	\$105
T502	Pore Distribution & Bubble Point	\$195
T502-C	Pore Distribution & Bubble Point with Cake Building Feature	\$245
T503	Gas Permeability, Pore Distribution & Bubble Point	\$210
T504	Bubble Point	\$75
T505	Microflow Permeability	\$170
T506	Liquid Permeability	\$135
T507	Hydro-Head	\$75
T508	Filter Integrity	\$80
T509	Microflow Permeability, Pore Distribution & Bubble Point	\$395
T511	In-Plane Gas Permeability	\$160
T512	In-Plane Flow Distribution & Bubble Point	\$250
T513	In-Plane Gas Permeability, Pore Distribution & Bubble Point	\$310
T514	In-Plane Bubble Point	\$130
T515	In-Plane Microflow Permeability	\$225
T516	In-Plane Liquid Permeability	\$190
T517	In-Plane Hydro-Head	\$130
T518	In-Plane Filter Integrity	\$135
T521	Hi-Flow Gas Permeability	\$170
T522	Hi-Flow Gas Distribution & Bubble Point	\$260
T523	Hi-Flow Gas Permeability, Pore Distribution & Bubble Point	\$320
T524	Hi-Flow Bubble Point	\$140
T525	Hi-Flow Microflow Permeability	\$235
T526	Hi-Flow Liquid Permeability	\$200
T527	Hi-Flow Hydro-Head	\$140
T528	Hi-Flow Filter Integrity	\$145
T500HT	Elevated Temperature Option (up to 180° C)	add \$105

PMI's Analytical 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 large numbers of samples, special test conditions or individual assistance, please contact PMI.

Liquid/Liquid Porometry

T1102 Pore Size & Pore Distribution	\$295
T1103 Microflow Liquid Permeability, Pore Size, & Pore Distribution	\$395



Compression Porometry

T601 Gas Permeability	\$160
T602 Pore Distribution & Bubble Point	\$280
T603 Gas Permeability, Pore Distribution & Bubble Point	\$310
T604 Bubble Point	\$105
T605 Microflow Permeability	\$230
T606 Liquid Permeability	\$215
T607 Hydro-Head	\$105
T611 In-Plane Gas Permeability	\$215
T612 In-Plane Pore Distribution & Bubble Point	\$335
T613 In-Plane Gas Permeability, Pore Distribution & Bubble Point	\$365
T614 In-Plane Bubble Point	\$160
T615 In-Plane Microflow Permeability	\$285
T616 In-Plane Liquid Permeability	\$270
T617 In-Plane Hydro-Head	\$160
T621 Hi-Flow Gas Permeability	\$225
T622 Hi-Flow Pore Distribution & Bubble Point	\$345
T623 Hi-Flow Gas Permeability, Pore Distribution & Bubble Point	\$375
T624 Hi-Flow Bubble Point	\$160
T625 Hi-Flow Microflow Permeability	\$295
T626 Hi-Flow Liquid Permeability	\$280
T627 Hi-Flow Hydro-Head	\$170

Diffusion Permeability & Vapor Transmission

T701 Diffusion Permeability	\$280
T702 Diffusion Permeability (High Temperature)	\$370
T703 Diffusion Permeability (High Pressure)	\$315
T704 Diffusion Permeability using a Mass Spectrometer	add \$200
T705 Water Vapor Transmission Rate (Humidity Gradient)	\$525
T706 Water Vapor Transmission Rate (Pressure Gradient)	\$265
T707 Water Vapor Transmission Rate (Range of Humidity)	\$630
T711 Gas Transmission (Concentrate Gradient)	\$495
T712 Gas Transmission with Moisture Gradient	\$695
T713 Gas Transmission with Moisture & Temperature Gradient	\$995

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

T801 Envelope Surface Area	\$100
T802 Envelope Surface Area & Average Particle Size	\$160
T803 Envelope Surface Area & Average Fiber Diameter	\$160
T804 Average Fiber Diameter	\$100

Liquid Extrusion Porosimetry

T901 Through Pore Volume & Distribution	\$265
T902 Hysteresis	add \$55
T903 Bulk & Absolute Density	add \$60
T904 Liquid Permeability	\$135
T905 Pore Volume, Distribution, & Liquid Permeability	\$370
T906 Microflow Liquid Permeability	\$205
T907 Effects of Compression on Pore Volume	add \$105
T908 Elevated Temperature Test (up to 200° C)	add \$105
T909 Through Pore Volume & Distribution (Directional, Top to Bottom, Bottom to Top)	\$475

Capillary Condensation Flow Porometry

T1001 Pore Size Distribution using Capillary Condensation	\$495
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**100% credit is provided for the use of our analytical services toward equipment purchase within 6 months
[up to a maximum of 10% of the equipment cost]**

TESTING REQUEST FORM

NAME: _____

P.O. # OR CC#: _____

COMPANY: _____

SECURITY CODE: _____

ADDRESS: _____

EXP. DATE: _____ (AMEx, VISA, MASTER, ETC.)

PHONE #: _____

REQUESTED TURNAROUND TIME:

EMAIL: _____

_____ 1-2 WEEKS

DO YOU WANT YOUR SAMPLES RETURNED? Y N

_____ 5 BUSINESS DAYS (+ 20%)

WOULD YOU LIKE A HARD COPY OF DATA? Y N

_____ 1-2 BUSINESS DAYS (+ 40%)

BILLING PHONE: _____

COMPLETE THIS FORM & MAIL WITH SAMPLES TO:

BILLING ADDRESS: _____

PMI TESTING SERVICES, 20 DUTCH MILL RD, ITHACA, NY 14850

Test, Price, Quantity	
Mercury Porosimetry	
T101	\$205
T102	add \$25
T103	add \$60
T104	add \$75
T105	\$280
Aquapore/Organopore (nonwetting/nonmercury porosimetry)	
T201	\$280
T202	add \$60
T203	\$360
Pycnometry	
T301	\$65
T302	\$75
BET Analysis Surface Area	
T401	\$100
T402	\$120
T403	\$145
T404	\$170
Gas Adsorption Analysis Using Nitrogen	
T410	\$235
T411	\$285
T412	\$285
T413	\$460
T414	\$520
T415	\$355
T416	\$355
T417	\$215
Gas Adsorption Analysis Using Gases OTHER Than Nitrogen	
T420	\$415
T421	\$545
T422	\$185
Aquasorb	
T430	\$415

Test, Price, Quantity	
Capillary Flow Porometry	
T501	\$105
T502	\$195
T502-C	\$245
T503	\$210
T504	\$75
T505	\$170
T506	\$135
T507	\$75
T508	\$80
T509	\$395
T511	\$160
T512	\$250
T513	\$310
T514	\$130
T515	\$225
T516	\$190
T517	\$130
T518	\$135

Liquid/Liquid Porometry	
T1102	\$295
T1103	\$395

Compression Porometry	
T601	\$160
T602	\$280
T603	\$310
T604	\$105
T605	\$230
T606	\$215
T607	\$105
T611	\$215
T612	\$335
T613	\$365
T614	\$160
T615	\$285
T616	\$270
T617	\$160

Test, Price, Quantity	
Diffusion Permeability & Vapor Transmission	
T701	\$280
T702	\$370
T703	\$315
T704	add \$200
T705	\$525
T706	\$265
T707	\$630
T711	\$495
T712	\$695
T713	\$995
Envelope Surface Area, Average Particle Size, & Average Fiber Diameter	
T801	\$100
T802	\$160
T803	\$160
T804	\$100
Liquid Extrusion Porosimetry	
T901	\$265
T902	add \$55
T903	add \$60
T904	\$135
T905	\$370
T906	\$205
T907	add \$105
T908	add \$105
T909	\$475
Capillary Condensation Flow Porometry	
T1001	\$495

Description of Sample(s) & Additional Comments:

Additional Requested Testing Services

Price: _____ Quantity: _____

Description: _____

Office use ONLY July 29, 2010

Lot#: _____

Samples Submitted: _____

Lab: _____ Acct: _____

Shipping Date: _____

Shipping Method:
Priority Next-Day Email Fax

Date Test Finished: _____

Shipping Conf #: _____