

# POROSITY AND PERMEABILITY TESTING ANALYTICAL TESTING SERVICES

(PRICES CURRENT AS OF JANUARY 2024)

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: info@pmiapp.com

# TESTING PRICES

Mercury Porosimetry		Capillary Flow Porometry (Continued)	
T101 Pore Volume, Pore Size Distribution, & Surface Area	\$290	T509 Microflow Permeability, Pore Distribution, & Bubble Point	\$950
T102 Hysteresis	add \$30	T511 In-Plane Gas Permeability	\$285
T103 Bulk & Absolute Density	add \$70	T512 In-Plane Flow Distribution & Bubble Point	\$390
T104 Particle Size Distribution	add \$85	T513 In-Plane Gas Permeability, Pore Distribution, & Bubble Point	\$495
T105 Compressed Sample Porosimetry	\$325	T514 In-Plane Bubble Point	\$120
Aquaoire/ Organopore: (Non-Mercury Porosimeter)		T516 In-Plane Liquid Permeability	\$320
T201 Pore Volume, Pore Size, & Surface Area	\$395	T517 In-Plane Hydro-Head	\$120
T202 Hysteresis	add \$100	T518 In-Plane Filter Integrity	\$220
T203 Compressed Sample Porosimetry	\$550	T521 Hi-Flow Gas Permeability	\$245
<u>Pycnometry</u>		T522 Hi-Flow Gas Distribution & Bubble Point	\$350
T301 Bulk Density (Mercury)	\$120	T523 Hi-Flow Permeability, Pore Distribution, & Bubble Point	\$425
T302 Absolute Density (Helium)	\$150	T524 Hi-Flow Bubble Point	\$160
BET Analysis: Surface Area		T526 Hi-Flow Liquid Permeability	\$340
T401 Single Point Surface Area - Nitrogen	\$115	T527 Hi-Flow Hydro-Head	\$160
T402 Single Point Surface Area - Krypton	\$140	T528 Hi-Flow Filter Integrity	\$165
T403 Multi-Point Surface Area - Nitrogen	\$170		
T404 Multi-Point Surface Area - Krypton	\$200		
Gas Adsorption Analysis: Using Nitrogen		Compression Porometry	
T410 Multi-Point Surface Area, Total Pore Volume & Average Pore Diameter (No Isotherm)	\$275	T601 Gas Permeability	\$245
T411 Complete Adsorption Isotherms (No Data Analysis)	\$330	T602 Pore Distribution & Bubble Point	\$395
T412 Complete Desorption Isotherms (No Data Analysis)	\$325	T603 Gas Permeability, Pore Distribution, & Bubble Point	\$450
T413 Adsorption & Desorption Isotherms (No Data Analysis)	\$520	T604 Bubble Point	\$120
T414 Multi-Point Surface Area, Adsorption & Desorption Isotherms, & Pore Distribution	ion \$585 T605 Microflow Permeability		\$750
T415 Multi-Point Surface Area, Adsorption Isotherms, & Pore Distribution	\$405	T606 Liquid Permeability	\$295
T416 Multi-Point Surface Area, Desorption Isotherms, & Pore Distribution	\$405	T607 Hydro-Head	\$120
T417 Chemisorption	\$250	0 T611 In-Plane Gas Permeability	
Gas Adsorption Analysis: Using Gases Other than Nitrogen		T612 In-Plane Pore Distribution & Bubble Point	\$495
T420 Adsorption or Desorption Isotherms	\$470	T613 In-Plane Gas Permeability, Pore Distribution & Bubble Point	\$520
T421 Adsorption & Desorption Isotherms	\$610	T614 In-Plane Bubble Point	\$185
T422 Specific Surface Area with Gases Other than Nitrogen & Krypton	\$215	T615 In-Plane Microflow Permeability	\$750
Aquasorb		T616 In-Plane Liquid Permeability	\$395
T430 Water Vapor Adsorption	\$470	T621 Hi-Flow Gas Permeability	\$370
Capillary Flow Porometry		T622 Hi-Flow Gas Distribution & Bubble Point	\$450
T501 Gas Permeability	\$245	T623 Hi-Flow Permeability, Pore Distribution, & Bubble Point	\$525
T501-F (Frazier)	\$125	T624 Hi-Flow Bubble Point	\$185
T501-C (C-522)	\$195	T625 Hi-Flow Microflow Permeability	\$750
T502 Pore Distribution & Bubble Point	\$295	T626 Hi-Flow Liquid Permeability	\$395
T503 Gas Permeability, Pore Distribution, & Bubble Point	\$345	T627 Hi-Flow Hydro-Head	\$195
T504 Bubble Point	\$120	Diffusion Permeability & Vapor Transmission	
T505 Microflow Permeability	\$750	T701 Diffusion Permeability	\$495

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T506 Liquid Permeability	\$245		
T507 Hydro-Head	\$120		
T508 Filter Integrity	\$150		
Envelope Surface Area, Average Particle Size & Average Fiber Diameter		Liquid Porometry	
T801 Envelope Surface Area	\$245	T1102 Pore Size & Pore Distribution	\$495
T802 Envelope Surface Area & Average Particle Size	\$295	T1103 Microflow Liquid Permeability, Pore Size & Pore Distribution	\$650
T803 Envelope Surface Area & Average Fiber Diameter	\$295	Burst Pressure Test	
T804 Average Fiber Diameter	\$245 T1201 Pore Burst Pressure Strength Test		\$150
Liquid Extrusion Porosimetry		Rock Core	
T901 Through Pore Volume & Distribution	\$495	T1301 Pulse Decay Permeability	\$750
T904 Liquid Permeability	\$295		
T905 Pore Volume, Distribution, & Liquid Permeability	\$695		
T907 Effects of Compression on Pore Volume	\$450		

## **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 & Tempurature.

### Mercury & Non-Mercury Intrusion Porosimetry:

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

#### **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 Stimulated Services Conditions:** 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 the equipment cost]

TESTING R	EQUEST FORM P.O. # or CC#:
Company:	Security Code: Exp. Date: (AmEx, Visa, Master, etc.)
Phone #:	5 business days (+ 20%)       1-2 Business Days (+ 40%)       1-2 Weeks         Name on Credit Card:
Do you want your samples returned?  Yes No Would you like a hard copy of data?  Yes No	Billing Phone:

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

Test# Price Quantity	Test# Price Quantity	Test# Price Quantity	
Mercury Porosimetry	Capillary Flow Porometry	<b>Diffusion Permeability &amp;</b>	
<b>T101</b> \$290	(Continued)	Vapor Transmission	
<b>T102</b> add \$30	<b>T507</b> \$120	<b>T701</b> \$495	S S
<b>T103</b> add \$70	<b>T508</b> \$150	Envelope Surface Area,	
<b>T104</b> add \$85	<b>T509</b> \$950	Average Particle Size	
<b>T105</b> \$325	<b>T511</b> \$385	& Average Fiber Diameter	itty:
Aquapore/ Organopore:	<b>T512</b> \$390	<b>T801</b> \$245	Additional Requested Testing Services Quantity:
(Nonwetting/ Non-Mercury Porosimetry	<b>T513</b> \$495	<b>T802</b> \$295	O O
<b>T201</b> \$395	<b>T514</b> \$120	<b>T803</b> \$295	l l l l l l l l l l l l l l l l l l l
<b>T202</b> add \$100	<b>T516</b> \$320	<b>T804</b> \$245	
<b>T203</b> \$550	<b>T517</b> \$120	Liquid Extrusion Porosimetry	
Pycnometry	<b>T518</b> \$220	<b>T901</b> \$495	Add
<b>T301</b> \$120	<b>T521</b> \$245	<b>T904</b> \$295	ü
<b>T302</b> \$150	<b>T522</b> \$350	<b>T905</b> \$695	i i i i i i i i i i i i i i i i i i i
BET Analysis: Surface Area	<b>T523</b> \$425	<b>T907</b> \$450	Price:
	<b>T524</b> \$160		
<b>T401</b> \$115	<b>T526</b> \$340	Liquid/ Liquid Porometry	
<b>T402</b> \$140	☐ <b>T527</b> \$160 ☐ <b>T528</b> \$165	□ <b>T1102</b> \$495	in i
<b>T403</b> \$170	☐ <b>T528</b> \$165 ☐ <b>T500HT</b> add \$115	<b>T1103</b> \$650	onf
<b>T404</b> \$200		Burst Pressure Test	g C
Gas Adsorption Analysis:		<b>T1201</b> \$150	Date Test Finished: Shipping Conf #:
	Communication Devicementary	Rock Core	ate .
<b>T410</b> \$275	<b>Compression Porometry</b>		
<b>T411</b> \$330	<b>T601</b> \$245	<b>T1301</b> \$750	
<b>T412</b> \$325	<b>T602</b> \$395		24 ×
<b>T413</b> \$520 <b>T414</b> \$585	<b>T603</b> \$450		202 Fax
	<b>T604</b> \$120		RY
☐ <b>T415</b> \$405 ☐ <b>T416</b> \$405	<b>T605</b> \$750		<b>Email</b>
<b>T410</b> \$405	<b>T606</b> \$295		Er   AN
Gas Adsorption Analysis:	<b>T607</b> \$120		
Using Gases OTHER than Nitrogen	<b>T611</b> \$320		NLY NLY
<b>T420</b> \$470	<b>T612</b> \$495		
<b>T420</b> \$470	<b>T613</b> \$520		AL USE C
<b>T422</b> \$215	<b>T614</b> \$185		FFICAL US
Aquasorb	<b>T615</b> \$750		PIC original origin
<b>T430</b> \$470	<b>T616</b> \$395		Pripp
	☐ <b>T621</b> \$370 ☐ <b>T622</b> \$450		OFFICAL Lot#: Samples Su Lab: Shipping D Priority
Capillary Flow Porometry			
<b>T501</b> 5245			
<b>T501-C</b> \$195			
<b>T502</b> \$295	<b>T625</b> \$750		
<b>T503</b> \$345	<b>1620</b> \$395	Description of Sample(s) & Additional Comments:	
<b>T504</b> \$120	-1027 - 5135		
<b>T505</b> \$750			
<b>T506</b> \$245			