

Aquapore

Principle

Aquapore is a liquid intrusion porosimeter used for characterization of hydrophobic pores. Water does not wet hydrophobic pores. Intrusion of water into pores occurs on application of pressure. Measured intrusion volume of water yields pore volume and measured intrusion pressure yields pore diameter.

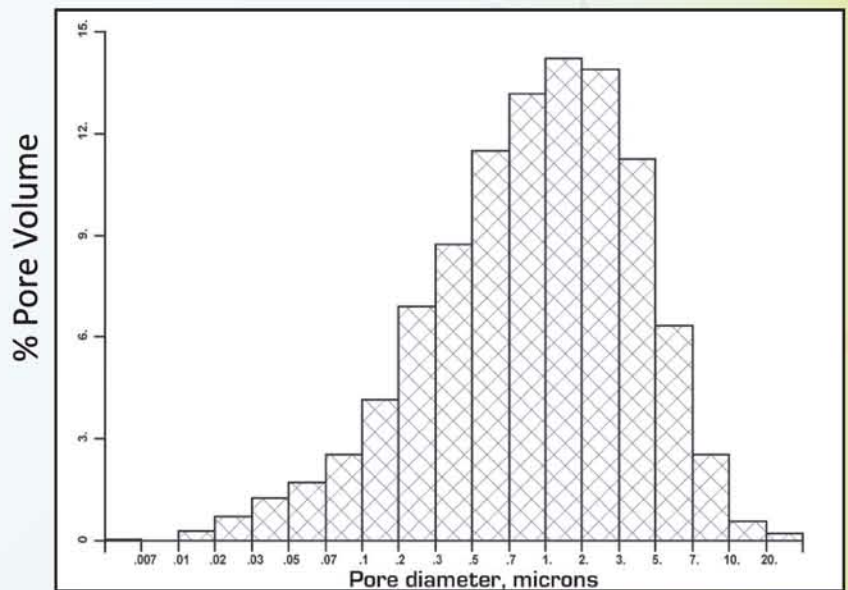
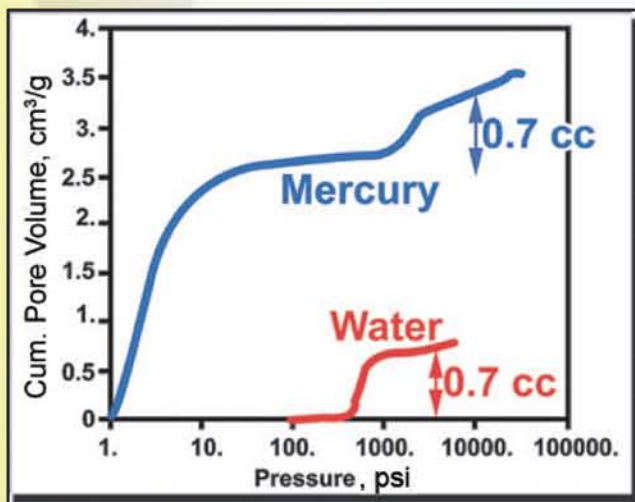
$$p = -4 \gamma \cos \theta / D$$

p = differential pressure on water γ = surface tension of water
 θ = contact angle of water D = pore diameter

Capability

Measures:

- Pore volume
- Pore diameter
- Pore volume distribution
- Hydrophobic through pores
- Hydrophobic blind pore



Specifications

- Windows controlled, fully automated test unit
- Total pore volume, pore size distribution and hysteresis of pores ranging from 20 to 0.005 microns
- Pure liquid (water or industrial alcohol) used with precise pressure control and pressurization
- No Mercury Required!
- Optical encoder utilized for measuring the change in volume
- Maximum pressure 30,000 psi

Special Features

- Use of no toxic material like mercury
- An order of magnitude lower intrusion pressure compared with mercury intrusion & minimal distortion of pore structure
- Much less expensive instrument compared with mercury intrusion porosimeter.
- Pore diameter range from 20 to 0.002 microns
- Completely automated windows based simple operation

Other Products

Average Fiber Diameter Analyzer	In-Plane Porometer	BET Liquisorb
Bubble Point Tester	Microflow Porometer	BET Sorptometer
Capillary Flow Porometer	QC Porometer	Gas Pycnometer
Complete Filter Cartridge Analyzer	Diffusion Permeameter	
Clamp-On Porometer	Gas Permeameter	Also Available:
Compression Porometer	Liquid Permeameter	Testing Services
Custom Porometer	Vapor Permeameter	Consulting Services
Cyclic Compression Porometer	Water Vapor Transmission Analyzer	Short Courses
Envelope Surface Area Analyzer	Liquid Extrusion Porosimeter	
Filtration Media Analyzer	Mercury/Nonmercury Intrusion	
High Flow Porometer	Porosimeter	
Integrity Analyzer	Mercury Pycnometer	

Buy Rent Lease

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