SRP

Product Data Sheet

poron® ALWAYS THERE

PORON®
4701-30-25047-04P
Very Soft Supported

PROPERTY	TEST METHOD	TYPICAL VALUE
PHYSICAL		
Density, kg/m^3 (lb./ft^3)	ASTM D3574-95, Test A	400 (25)
Tolerance, %		± 10
Thickness, mm (inches)		1.19 (0.047)
Tolerance, %		± 15
Standard Color (Code)		Black (04)
Compression Force Deflection,		
Range kPa, (psi)	0.51cm/min (0.2"/min) Strain Rate Force Measured @ 25% Deflection	35 - 83 (5 - 12)
Typical kPa, (psi)		58 (8.4)
Compression Set, % max	ASTM D1667-90 Test D @ 23°C (73°F) ASTM D3574-95 Test D @ 70°C (158°F)	4 10
ELECTRICAL & THERMAL		
Dielectric Constant, K' ("DK")	ASTM D150 Measurements at 22°C (72°F) Relative Humidity 50% for 24 hrs.	1.75
Dielectric Strength, kV/m (volts/mil)	ASTM D149-97a	1969 (50)
Dissipation Factor, tan D ("DF")	ASTM D150-98	0.05
Volume Resistivity, ohm-cm (ohm-in)	ASTM D257-99	3.1 x 10^{11} (1.22 x 10^{11})
Surface Resistivity, ohm/sq	ASTM D257-99	5.9 x 10^{11}
Coefficient of Thermal Expansion		2.3-3.1 x 10^{-4} in/in/°C (1.3-1.7 x 10^{-4} in/in/°F)
TEMPERATURE RESISTANCE		
Recommended Constant Use, max.	SAE J-2236	90°C (194°F)
Recommended Intermittent Use, max.		121°C (250°F)
Embrittlement	ASTM D746-98	-51°C (-60°F)

ROGERS CORPORATION

PROPERTY	TEST METHOD	TYPICAL VALUE
OUTGASSING		
Fogging	SAE J-1756, 3 hrs @ 100°C (212°F)	Pass
Outgassing		
Total Mass Loss (TML) %	ASTM E595-93 24 hrs @ 125°C (257°F) @ <7kPa (1.02 psi)	1.3
Collected Volatile Condensable Materials, (CVCM) %		0.2
Water Vapor Regain (WVR) %		0.6
ENVIRONMENTAL		
Gasketing & Sealing	UL JMST2 (Consisting of UL50 & UL508)	File MH15464
Moisture Absorption, High Humidity Exposure, % Weight Gain, Typical	AMS 3568-95	2
Water Absorption, Immersion Testing, % Weight Gain, Typical	ASTM D570-95	14

The data mentioned above represents results of testing the PORON polyurethane foam only. PORON cellular polyurethane material is supported by being directly cast onto 0.05 mm (2 mil) polyester film. By casting directly onto the film, a permanent bond is created. Please see physical property data for the film as represented by manufacturer below.

Supporting Material - Clear Polyester Film (PET)

PROPERTY	TEST METHOD	VALUE
Coefficient of Friction A/B, (Kinetic)	ASTM D1894	0.40
Density, kg/m^3 (lb/ft^3)	ASTM D1505	1395 (87.1)
Modulus, MD, kPa (psi)	ASTM D882	3.5×10^6 (500,000)
Shrinkage, MD, % (TD)	39 min. @ 150°C (302°F)	1.2 (0.0)
Tensile Strength, MD, kPa (psi)	ASTM D882	2.1×10^5 (30,000)
Ultimate Elongation, %	ASTM D882	150
Yield Strength (F5), kPa (psi)	ASTM D882	1.0×10^5 (15,000)

Notes:

- All metric conversions are approximate.
- Additional technical information is available.
- Typical values should not be used for specification limits.

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