

PORON® 4701-30-25037-04P Very Soft-Supported – Data Sheet

PROPERTY	TEST METHOD	VALUE
PHYSICAL		
Density, kg/m ³ (lb./ft ³) Tolerance, %	ASTM D3574-95, Test A	400 (25) ± 10
Thickness, mm (inches) Tolerance, %		0.94 (0.037) ± 15
Standard Color (Code)		Black (04)
Compression Force Deflection Range kPa (psi) Typical kPa (psi)	0.51 cm/min (0.2" / min) Strain Rate Force Measured @ 25% Deflection	35 – 83 (5 - 12) 58 (8.4)
Compression Set, % max.	ASTM D 1667-90 Test D @ 23°C (73°F) ASTM D 3574-95 Test D @ 70°C (158°F)	4 10
ELECTRICAL AND THERMAL		
Dielectric Constant, K', "DK"	ASTM D 150 measurements at 22°C (72°F) relative humidity 50% for 24 hrs.	1.75
Dielectric Strength, kV/m (volts/mil)	ASTM D 149-97a	1969 (50)
Dissipation Factor, tan D, "DF"	ASTM D 150-98	0.05
Volume Resistivity, ohm-cm (ohm-in)	ASTM D 257-99	3.1 x 10 ¹¹ (1.22 x 10 ¹¹)
Surface Resistivity, ohm/sq.	ASTM D 257-99	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 D 746-98	-51°C (-60°F)

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PORON® 4701-30-25037-04P Very Soft-Supported, Continued

PROPERTY	TEST METHOD	VALUE
OUTGASSING		
Fogging	SAE J-1756	Pass
Outgassing		
Total Mass Loss (TML) %	ASTM E 595-93	1.3
Collected Volatile Condensable Materials (CVCM) %	24 hrs @125°C (257°F) @ <7 kPa (1.02psi)	0.2
Water Vapor Regain (WVR) %		0.6
ENVIRONMENTAL		
Gasketing and Sealing	UL JMST2 (Consisting of UL50 and UL508)	File MH15464
Water Absorption, High Humidity Exposure, % weight gain, typical	AMS 3568-95	2
Water Absorption, Immersion Testing, % weight gain, typical	ASTM D 570-95	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 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 D 1894	0.40
Density, kg /m ³ (lb. / ft ³)	ASTM D 1505	1.395 (87.1)
Modulus, MD, kPa (psi)	ASTM D 882	3.5 x 10 ⁶ (500,000)
Shrinkage, MD, %, (TD)	39 min. at 150°C (302°F)	1.2 (0.0)
Tensile Strength, MD, kPa (psi)	ASTM D 882	2.1 x 10 ⁵ (30,000)
Ultimate Elongation	ASTM D 882	150
Yield Strength (F5), kPa (psi)	ASTM D 882	1.0 x 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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