ROGERS CORPORATION

PORON® Polyurethanes

Elastomeric Material Solutions
www.rogerscorp.com

Typical Product Properties

PORON® AquaPro® Family: Formulation 37 – Supported – Data Sheet

PROPERTY	TEST METHOD	VALUE
PHYSICAL		
Density, kg/m³ (lb. / ft³)	ASTM D 3574, Test A	304 (19)
Tolerance, kg/m³ (lb. / ft³)		± 32 (2)
Thickness, mm (in)	ASTM D 3574, Test A	0.50 – 1.0 (0.020 – 0.039)
Tolerance		± 0.10 (.0039)
Compression Force Deflection, kPa	Modified ASTM D 3574: PTP-0033 at 25% deflection	41 – 110
(psi)		(6 – 16)
Compression Set, % max. after 24 hour recovery	ASTM D 3574 Test D @ 70°C (158°F)	10
Standard Color (Code)		Black (04)
Recommended Constant Use, Max °C (°F)	SAE J-2236	90 (194)
Recommended Intermittent Use, Max °C (°F)	UL 157	121 (250)
OUTGASSING		
Fogging	SAE J-1756 3 hrs @ 100°C (212°F)	No Fogging
Outgassing, Total Mass Loss (TML) %	ASTM E 595 24 hrs @ 125°C (257°F) @ <7x103 Pa	0.58
Collected Volatile Condensable Materials (CVCM) %		0.02
Water Vapor Regain (WVR) %		0.09
ENVIRONMENTAL		
Moisture Absorption, High Humidity Exposure, % weight	AMS 3568	1.1
Water Immersion, %	ASTM D570	2.84
Water Absorption, Vacuum Exposure, % weight gain	ASTM D 1056 ASTM 3568B	0.94 0.33

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, g/cm³	ASTM D 1505	1.395
Modulus, MD, psi (kg/cm²)	ASTM D 882	500,000 (35,200)
Shrinkage, MD, %, (TD)	39 min. at 150°C	1.2 (0.0)
Tensile Strength, MD, psi (kg/cm²)	ASTM D 882	30,000 (2,110)
Ultimate Elongation	ASTM D 882	150
Yield Strength (F5), psi (kg/cm²)	ASTM D 882	15,000 (1,050)

Notes:

- All metric conversions are approximate.
- Additional technical information is available.
- Values should not be used for specification limit