

PORON® Urethane Foams

Typical Product Properties

PORON® 92 Extra Soft – Slow Rebound

PROPERTY	TEST METHOD	VALUE	
PHYSICAL			
Density , lb. / ft ³ (kg /m ³)	ASTM D 3574-95, Test A	12 (192)	15 (240)
Tolerance , %		± 10	
Thickness , inches (mm)		0.155 - 0.425 (3.94 - 10.80)	0.125 - 0.500 (3.18 - 12.70)
Tolerance , %		± 10	
Standard Color (Code)		Black (04)	
Compression Force Deflection , psi (kPa)	0.2" / min. Strain Rate Force Measured @ 25% Deflection	0.25-2.5 (1.7 - 17)	0.3 - 3.5 (2 - 24)
Typical psi (kPa)		1.4 (10)	2 (14)
Hardness , Durometer, Shore "O",	ASTM D 2240-97	< 3	< 5
Compression Set , % max.	ASTM D 1667-90 Test D @ 73°F (23°C) ASTM D 3574-95 Test D @ 158°F (70°C) ASTM D 3574-95 Test J/Test D autoclaved 5 hrs @ 250°F (121°C)	2	10
		5	
Resilience by Vertical Rebound , %	ASTM D 2632-96	4	
Dimensional Stability , % max. change	22 hrs @ 176°F (80°C) in a forced-air oven	± 3	± 5
Tensile Strength , Min. psi (kPa), Typical psi (kPa)	ASTM D 3574-75 Test E	12 (83) -	15 (103) 30 (207)
Tensile Elongation , % min., Typical	ASTM D 3574-75 Test E	150 -	120 206
Tear Strength , Min. pli (kN/m), Typical pli (kN/m)	ASTM D 264-91 Die C	2 (0.4) -	4 (0.7) 5 (0.9)
ELECTRICAL AND THERMAL			
Dielectric Constant , K' ("DK")	ASTM D 150 measurements at 72°F (22°C) relative humidity 50% for 24 hrs.	-	1.48
Dielectric Strength , volts/mil	ASTM D 149-97a	42	50
Dissipation Factor , tan D ("DF")	ASTM D 150-98	-	0.04
Volume Resistivity , ohm-cm	ASTM D 257-99	-	8 x 10 ¹¹
Surface Resistivity , ohm/sq.	ASTM D 257-99	-	10 x 10 ¹¹
Coefficient of Thermal Expansion		2.3 - 3.1 x 10 ⁻⁴ in./in./°C	

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PORON® 92 Extra Soft – Slow Rebound Continued

PROPERTY	TEST METHOD	VALUE	
Density, lb. / ft ³ (kg / m ³)	ASTM D 3574-95, Test A	12 (192)	15 (240)
TEMPERATURE RESISTANCE			
Recommended Constant Use, max.	SAE J-2236	194°F (90°C)	
Recommended Intermittent Use, max.		250°F (121°C)	
Embrittlement	ASTM D 746-98	-4°F (-20°C)	
FLAMMABILITY AND OUTGASSING			
Flammability	UL 94HBF (File E20305) (Pass ≥)	.155" (3.94mm)	.118" (3.0mm)
	MVSS 302 (Pass ≥)	.155" (3.94mm)	.118" (3.0mm)
	CSA Comp HBF (File 188149) (Pass ≥)	.155" (3.94mm)	.118" (3.0mm)
Fogging	SAE J-1756 3 hrs @ 212°F (100°C)	Pass	
Outgassing, Total Mass Loss (TML) %	ASTM E 595-93 24 hrs @ 257°F (125°C) @ <7x10 ³ Pa	0.76	1.73
Outgassing, Collected Volatile Condensable Materials (CVCM) %		0.04	0.14
Outgassing, Water Vapor Regain (WVR) %		0.60	0.71
ENVIRONMENTAL			
Gasketing and Sealing	UL JMST2 (Consisting of UL50 and UL508) CAN/CSA – C22.2 No. 94-M91	-	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	38	34
Mildew/Bacteria Resistance	ASTM G 21	Good	
Staining	ASTM D 925	No Stain	
Skin Contact Irritation	Primary Skin Irritation Test (FHSA)	Pass	

These materials are unsupported and should be processed with the knowledge that stretching of die cut parts can occur when material has not been relaxed.

Notes:

1. – represents testing not available at this time.
2. All metric conversions are approximate.
3. Additional technical information is available.
4. Typical values should not be used for specification limits.

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