

PORON[®] Polyurethanes

Typical Product Properties

PORON[®] 92 Extra Soft – Slow Rebound- Data Sheet

PROPERTY	TEST METHOD	VALUE			
PHYSICAL					
Density, kg /m ³ (lb. / ft ³)	ASTM D 3574-95, Test A	192 (12)	240 (15)		
Tolerance, %		± 10			
Thickness, mm (inches)		3.175 - 10.80	3.18 - 12.70		
		(0.125 - 0.425)	(0.125 - 0.500)		
Tolerance, %		± 10			
Standard Color (Code)		Black (04)			
Compression Force Deflection, kPa (psi)	0.51 cm-mm (0.2″ / min)Strain Rate	1.7 - 17	2 - 24		
	Force Measured @ 25% Deflection	(0.25-2.5)	(0.3 - 3.5)		
Hardness, Durometer, Shore "OO",	ASTM D 2240-97	< 3	< 5		
Compression Set, % max.	ASTM D 1667-90	2			
	Test D @ 23°C (73°F)				
	ASTM D 3574-95	10			
	Test D @ 70°C (158°F)				
	ASTM D 3574-95 Test J/Test D	5			
	autoclaved 5 hrs @ 121°C (250°F)				
Resilience by Vertical Rebound, %	ASTM D 2632-96	4			
Dimensional Stability, % max. change	22 hrs @ 80°C (176°F) in a forced-air oven	± 3	± 5		
Tensile Strength, Min. kPa (psi)	ASTM D 3574-75 Test E	83 (12)	103 (15)		
Tensile Elongation, % min.,	ASTM D 3574-75 Test E	150	120		
Tear Strength, Min. kN/m (pli)	ASTM D 264-91 Die C	0.4 (2)	0.53 (3)		
ELECTRICAL AND THERMAL	· · · · · · · · · · · · · · · · · · ·				
Dielectric Constant, K' ("DK")	ASTM D 150 measurements at 22°C (72°F) 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	(1.3-1.7 x 10 ⁻⁴ in/in/°F)		

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PORON® 92 Extra Soft – Slow Rebound, Continued

PROPERTY	TEST METHOD	VALUE	
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	-20°C (-4°F)	
FLAMMABILITY AND OUTGASSING	i		
Flammability	UL 94HBF (File E20305) (Pass ≥) MVSS 302 (Pass ≥)	3.94mm (.155″) 3.94mm (.155″)	3.0mm (.118″) 3.0mm (.118″)
	CSA Comp HBF (File 188149) (Pass ≥)	3.94mm (.155″)	3.0mm (.118")
Fogging	SAE J-1756 3 hrs @ 100°C (212°F)	Pass	
Outgassing, Total Mass Loss (TML) %	ASTM E 595-93 24 hrs @ 125°C (257°F) @ <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	

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:

- – Represents testing not available at this time.
- All metric conversions are approximate.
- Additional technical information is available.
- Typical values should not be used for specification limits.

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