



PORON® Polyurethanes

Elastomeric Material Solutions
www.rogerscorp.com

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 (0.125 - 0.425)	3.18 - 12.70 (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 Force Measured @ 25% Deflection	1.7 - 17 (0.25-2.5)	2 - 24 (0.3 - 3.5)
Hardness, Durometer, Shore "O",	ASTM D 2240-97	< 3	< 5
Compression Set, % max.	ASTM D 1667-90 Test D @ 23°C (73°F) ASTM D 3574-95 Test D @ 70°C (158°F) ASTM D 3574-95 Test J/Test D autoclaved 5 hrs @ 121°C (250°F)	2	10
Resiliency by Vertical Rebound, %	ASTM D 2632-96	4	5
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)	

The information contained in this Data Sheet is intended to assist you in designing with Rogers' Elastomeric Material Solutions. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results shown in this Data Sheet will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers' PORON Polyurethane Materials for each application. The Rogers logo, Helping power, protect, connect our world, and PORON are trademarks of Rogers Corporation or one of its subsidiaries. © 2000-2003, 2006, 2008, 2009, 2016, 2017, 2019 Rogers Corporation, All rights reserved. Printed in the U.S.A. 0719-PDF Publication # 17-038

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			
Flammability	UL 94HBF (File E20305) (Pass ≥)	3.94mm (.155")	3.0mm (.118")
	MVSS 302 (Pass ≥)	3.94mm (.155")	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	
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:

- – 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.



www.marianinc.com
1-800-773-0062

The information contained in this Data Sheet is intended to assist you in designing with Rogers' Elastomeric Material Solutions. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results shown in this Data Sheet will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers' PORON Polyurethane Materials for each application. The Rogers logo, Helping power, protect, connect our world, and PORON are trademarks of Rogers Corporation or one of its subsidiaries. © 2000-2003, 2006, 2008, 2009, 2016, 2017, 2019 Rogers Corporation, All rights reserved. Printed in the U.S.A. 0719-PDF Publication # 17-038

Helping power, protect, connect our world™