



PORON® Polyurethanes



Authorized Distributor,
Converter, and Fabricator
www.jbc-tech.com

Elastomeric Material Solutions
www.rogerscorp.com

Typical Product Properties

PORON® 4790-92-25041-04P Extra Soft - Slow Rebound - 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, %		1.04 (0.041) ± 15
Standard Color (Code)		Black (04)
Compression Force Deflection Range kPa (psi), Typical kPa (psi)	0.51cm/min (0.2" / min) Strain Rate Force Measured @ 25% Deflection	8 - 58 (1.25 - 8.5) 37 (5.3)
Compression Set, % max.	ASTM D 1667-90 Test D @ 23°C (73°F) ASTM D 3574-95 Test D @ 70°C (158°F)	2 10
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, kV/m (volts/mil)	ASTM D 149-97a	1969 (50)
Dissipation Factor, tan D, "DF"	ASTM D 150-98	0.04
Volume Resistivity, ohm-cm (ohm-in)	ASTM D 257-99	8.0 x 10 ¹¹ (3.2 x 10 ¹¹)
Surface Resistivity, ohm/sq.	ASTM D 257-99	10.0 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	-12°C (10°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 Foam 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. © 2003, 2004, 2008, 2017 Rogers Corporation, All rights reserved. Printed in U.S.A., 1217-PDF, Publication #17-088

PORON® 4790-92-25041-04P Extra Soft - Slow Rebound - Supported, Continued

PROPERTY	TEST METHOD	VALUE
OUTGASSING		
Fogging	SAE J-1756	Pass
Outgassing		
Total Mass Loss (TML) %	ASTM E 595-93	1.44
Collected Volatile Condensable Materials (CVCM) %	24 hrs @125°C (257°F) @ <7 kPa (1.02psi)	0.27
Water Vapor Regain (WVR) %		0.44
ENVIRONMENTAL		
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.

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 Foam 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. © 2003, 2004, 2008, 2017 Rogers Corporation, All rights reserved. Printed in U.S.A., 1217-PDF, Publication #17-088