Argent

poron® ALWAYS THERE

PORON® 4701-60 Very Firm

PROPERTY	TEST METHOD	VALUE		
PHYSICAL				
Density, kg/m³ (lb./ft³)	ASTM D3574-95, Test A	240 (15)	320 (20)	400 (25)
Tolerance			± 10	
Thickness, mm (inches)		3.18 - 6.35 (0.125 - 0.250)	0.79 - 4.78 (0.031 - 0.188)	0.79 - 2.36 (0.031 - 0.093)
Tolerance, %			± 10	
Standard Color (Code)			Black (04)	
Compression Force Deflection, kPa (psi)	0.51 cm/min (0.2"/min Strain Rate Force Measured @ 25% Deflection	124 - 345 (18 - 50)	241 - 586 (35 - 85)	345 - 896 (50 - 130)
Typical kPa (psi)		249 (36)	428 (62)	643 (93)
Hardness, Durometer Shore O	ASTM D2240-97	42	55	63
Shore A		30	42	53
Compression Set, % max	ASTM D3574-95 Test D @ 23°C (73°F)		5	
	ASTM D3574-95 Test D @ 70°C (158°F)		10	
	ASTM D3574-95 Test J/Test D Autoclaved 5 hrs @ 121°C (250°F)		10	
Dimensional Stability, % max change	22 hrs @ 80°C (176°F) in a Forced-Air Oven		± 5	
Tensile Strength, min. kpa (psi)	ASTM D3574-75 Test E	931 (135)	1382 (200)	1724 (250)
Tensile Elongation, % min.	ASTM D3574-75 Test E	50	45	50
Tear Strength , min. kN/m, (pli)	ASTM D264-91 Die C	2.1 (12)	3.0 (17)	3.3 (19)
Typical kNm, (pli)		3.3 (19)	4.4 (25)	5.3 (30)

ROGERS CORPORATION

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 PORON Polyurethane Foam Materials for each application. The Rogers logo, PORON, and the PORON logo are trademarks of Rogers Corporation or one of its subsidiaries. © 2003, 2008, 2009, 2012, 2017, 2019, 2020, 2023 Rogers Corporation. All rights reserved. 0723-PDF • Publication #17-018

PROPERTY	TEST METHOD	VALUE		
ELECTRICAL & THERMAL		240 (15)	320 (20)	400 (25)
Dielectric Constant, K' ("DK")	ASTM D150 @ 22°C (72°F) Relative Humidity 50% for 24 hrs		1.60	
Dielectric Strength, volts/mil	ASTM D149-97a		50	
Dissipation Factor, tan D ("DF")	ASTM D150-98		0.05	
Volume Resistivity, ohm-cm	ASTM D257-99		7×10^{12}	
Surface Resistivity, ohm/sq.	ASTM D257-99		3×10^{12}	
Thermal Conductivity, W/m-C BTU-in./hr/ft^2-F)	ASTM C518-98	-	0.088 (0.61)	-
Coefficient of Thermal Expansion		$2.3 - 3.1 \times 10^{-4}$ in/in/°C ($1.3 - 1.7 \times 10^{-4}$ in/in/°F)		
TEMPERATURE RESISTANCE				
Recommended Constant Use, max.	SAE J-2236		90°C (194°F)	
Recommended Intermittent Use, max.	UL JMST2 (UL50 and UL508)		121°C (250°F)	
Brittleness Temperature	ASTM D746-98		-16°C (3°F)	
Cold Flexibility	MIL-P-12420D 1991 @ -40°C (-40°F)		Pass	
FLAMMABILITY & OUTGASSING				
Flammability, mm (inches)	UL 94HBF‡ (File E20305) (Pass ≥) FMVSS 302 (Pass ≥) CSA Comp HBF (File 188149) (Pass≥)	3.175 (0.125) 3.175 (0.125) 3.175 (0.125)	1.6 (0.062) 1.6 (0.062) 1.6 (0.062)	- 1.6 (0.062) -
Fogging	SAE J-1756 3 hrs @ 100°C (212°F)		Pass	
Outgassing, Total Mass Loss (TML) %	ASTM E595-93 24 hrs @ 125°C (257°F) @ <7 x 10^3 kPa	0.6	0.7	0.7
Outgassing, Collected Volatile Condensable Materials (CVCM) %		0.05	0.02	0.03
Outgassing, Water Vapor Regain (WVR) %		0.5	0.5	0.6

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 PORON Polyurethane Foam Materials for each application. The Rogers logo, PORON, and the PORON logo are trademarks of Rogers Corporation or one of its subsidiaries. © 2003, 2008, 2009, 2012, 2017, 2019, 2020, 2023 Rogers Corporation. All rights reserved. 0723-PDF • Publication #17-018

PROPERTY	TEST METHOD	VALUE		
ENVIRONMENTAL		240 (15)	320 (20)	400 (25)
Gasketing and Sealing	UL JMST2 (Consisting of UL50 & UL508) CAN/CSA-C22.2 No. 94-M91		File MH15464 File 188149	
Moisture Absorption, High Humidity Exposure, % Weight Gain, Typical	AMS 3568-95		2	
Water Absorption, Immersion Testing, % Weight Gain, Typical	ASTM D570-95	19	20	6
UV Resistance	ASTM G53-96		Good	
Ozone Resistance	GM 4486P-95		Pass	
Corrosion Resistance	AMS 3568-91		Pass	
Mildew/Bacteria Resistance	ASTM G21		Good	
Staining	ASTM D925		No Stain	
Skin Contact Irritation	Primary Skin Irritation Test (FHSA)		Pass	

Notes:

‡Designed to meet UL 94 HBF based upon 2022 test criteria. As of 2023 items with nominal density ≥ 15.6lb/ft^3 (250kg/m^3) are no longer eligible to be tested for UL 94 HBF but remain equivalent.

- - 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.

To order PORON materials, please contact our Sales Specialists at 860.928.3622 or via email at EMS_CT_cust_serv@rogerscorporation.com

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 PORON Polyurethane Foam Materials for each application. The Rogers logo, PORON, and the PORON logo are trademarks of Rogers Corporation or one of its subsidiaries. © 2003, 2008, 2009, 2012, 2017, 2019, 2020, 2023 Rogers Corporation. All rights reserved. 0723-PDF • Publication #17-018