

PORON[®] AquaPro[®] 4701-41 Soft - Enhanced Sealability



PROPERTY **TEST METHOD TYPICAL VALUE PHYSICAL** Density, kg/m³ (lb./ft³) ASTM D3574-95, Test A 240 (15) 320 (20) 480 (30) Tolerance, % ±10 4.78 - 12.7 1.57 - 3.18 0.79 - 1.14 Thickness, mm (inches) (0.188 - 0.500) (0.062 - 0.125)(0.031 - 0.045) Tolerance, % ± 10 ± 10 ± 20 Standard Color (Code) Black (04) 0.51cm/min (0.2"/min) Strain Rate 76-183 (11-20) 138-317 (20-46) 41 - 83 (6 - 12) Compression Force Deflection, kPa (psi) Force Measured @ 25% Deflection Typical kPa, (psi) 69 (9.3) 103 (15) 193 (28) 18 24 55 Hardness, Durometer Shore O ASTM D2240-97 5 ASTM D3574-95 Test D @ 23°C (73°F) Compression Set, % max ASTM D3574-95 Test D @ 70°C (158°F) 10 After 24 hour Recovery ASTM D3574-95 Test J/Test D 5 Autoclaved 5 hrs @ 121°C (250°F) 22 hrs @ 80°C (176°F) ±2 Dimensional Stability, % max change in a Forced-Air Oven Tensile Strength, kPa (psi) min. ASTM D3574-75, Test E 276 (40) 517 (75) 827 (120) Tensile Elongation, % min. 100 ASTM D3574-75, Test E Tear Strength, kN/m (pli) min. 1.1 (6) 1.4 (8) 2.6 (15) ASTM D264-91 Die C Typical kN/m (pli) 1.8 (10) 2.3 (13) 3.2 (18) **ELECTRICAL & THERMAL** ASTM D150 Measurements at 22°C (72°F) Dielectric Constant, K' ("DK") 1.71 Relative Humidity 50% for 24 hrs. Dielectric Strength, kV/m (volts/mil) ASTM D149-97a 1969 (50) Dissipation Factor, tan D ("DF") ASTM D150-98 0.05

Dissipation racial, and ControlAstim DiscreteVolume Resistivity, ohm-cmASTM D257-991 x 1012Surface Resistivity, ohm/sqASTM D257-992 x 1012Thermal Conductivity, W/m-C
(BTU-in./hr/ft2-F)ASTM C518-98-Coefficient of Thermal Expansion2.3-3.1 x 10⁴ in/in/°C (1.3-1.7 x 10⁻⁴ in/in/°F)



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PROPERTY	TEST METHOD		TYPICAL VALUE		
TEMPERATURE RESISTANCE		240 (15)	320 (20)	480 (30)	
Recommended Constant Use, max.	SAE J-2236		90°C (194°F)		
Recommended Intermittent Use, max.		121°C (250°F)			
Embrittlement	ASTM D746-98		-		
Cold Flexibility	MIL-P-12420D 1991 @ -40°C (-40°F)	Pass			
FLAMMABILITY AND OUTGASSI	NG				
Flammability, mm (inches)	UL 94HBF [†] (File E20305) (Pass ≥) FMVSS 302 (Pass ≥) CSA Comp HBF (File 188149) (Pass ≥)	4.8 (0.188) - -			
Fogging	SAE J-1756 3 hrs @ 100°C (212°F)		-		
Outgassing, Total Mass Loss (TML) %	ASTM E595-93 24 hrs @ 125°C (257°F) @ <7 x 10 ³ Pa	0.84	0.97	1.0	
Outgassing, Collected Volatile Condensable Materials (CVCM) %		0.05	0.04	0.06	
Outgassing, Water Vapor Regain (WVR) %		0.4	0.46	0.65	
ENVIRONMENTAL					
Gasketing & 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	3			
Water Absorption, Immersion Testing, % Weight Gain, Typical	ASTM D570-95	15	13	6	
UV Resistance	ASTM G53-96	-			
Ozone Resistance	GM 4486P-95	-			
Corrosion Resistance	AMS 3568-91	-			
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 \geq 15.6lb/ft³ (250kg/m³) 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.

For more information and to request a sample, please contact our team of experts at info@seconrubber.com



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