

**PORON® Urethane Foams**

 Effective: April 1, 2015  
Supersedes: November 4, 2014

## Product Data Sheet

**PORON® AquaPro™ 4701-41 Soft – Enhanced Sealability**

PROPERTY	TEST METHOD	VALUE		
<b>PHYSICAL</b>				
<b>Density</b> , lb. / ft <sup>3</sup> (kg / m <sup>3</sup> )	ASTM D 3574-95, Test A	15 (240)	20 (320)	30 (480)
<b>Tolerance</b> , %		± 10		
<b>Thickness</b> , inches (mm)		0.188 - 0.500 (4.78 – 12.70)	0.062 - 0.125 (1.57 – 3.18)	0.031 - 0.045 (0.79 – 1.14)
<b>Tolerance</b> , %		± 10		± 20
<b>Standard Color</b> (Code)		Black (04)		
<b>Compression Force Deflection</b> , psi (kPa)	0.2" / min. Strain Rate Force Measured @ 25% Deflection	6 - 12 (41 - 83)	11 - 20 (76 - 138)	20 - 46 (138 - 317)
<b>Typical psi (kPa)</b>		<b>9.3 (64)</b>	<b>15 (103)</b>	<b>28 (193)</b>
<b>Hardness</b> , Durometer, Shore "O"	ASTM D 2240-97	18	24	55
<b>Compression Set</b> , % max. after 24 hour recovery	ASTM D 3574-95 Test D @ 73°F (23°C) ASTM D 3574-95 Test D @ 158°F (70°C) ASTM D 3574-95 Test J/Test D autoclaved 5 hrs @ 250°F (121°C)	5		
<b>Dimensional Stability</b> , % max. change	22 hrs @ 176°F (80°C) in a forced-air oven	± 2		
<b>Tensile Strength</b> , Min. psi (kPa), <b>Typical psi (kPa)</b>	ASTM D 3574-75 Test E	40 (276) <b>67 (462)</b>	75 (517) <b>88 (607)</b>	120 (827) <b>149 (1027)</b>
<b>Tensile Elongation</b> , % min., <b>Typical</b>	ASTM D 3574-75 Test E	100 <b>149</b>	100 <b>140</b>	100 <b>136</b>
<b>Tear Strength</b> , Min. pli (kN/m), <b>Typical pli (kN/m)</b>	ASTM D 264-91 Die C	6 (1.1) <b>10 (1.8)</b>	8 (1.4) <b>13 (2.3)</b>	15 (2.6) <b>18 (3.2)</b>
<b>ELECTRICAL AND THERMAL</b>				
<b>Dielectric Constant</b> , K' ("DK")	ASTM D 150 measurements at 72°F (22°C) relative humidity 50% for 24 hrs.	1.71		
<b>Dielectric Strength</b> , volts/mil	ASTM D 149-97a	50		
<b>Dissipation Factor</b> , tan D ("DF")	ASTM D 150-98	0.05		
<b>Volume Resistivity</b> , ohm-cm	ASTM D 257-99	1 x 10 <sup>12</sup>		
<b>Surface Resistivity</b> , ohm/sq.	ASTM D 257-99	2 x 10 <sup>12</sup>		
<b>Thermal Conductivity</b> , W/m-C (BTU-in./hr/ft <sup>2</sup> -F)	ASTM C 518-98	-	-	-
<b>Coefficient of Thermal Expansion</b>		2.3 - 3.1 x 10 <sup>-4</sup> in./in./°C		

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## PORON AquaPro 4701-41 Soft – Enhanced Sealability Continued

PROPERTY	TEST METHOD	VALUE		
Density, lb. / ft <sup>3</sup> (kg / m <sup>3</sup> )	ASTM D 3574-95, Test A	15 (240)	20 (320)	30 (480)
<b>TEMPERATURE RESISTANCE</b>				
Recommended Constant Use, max.	SAE J-2236	194°F (90°C)		
Recommended Intermittent Use, max.		250°F (121°C)		
Embrittlement	ASTM D 746-98	-		
Cold Flexibility	MIL-P-12420D 1991 @ -40°F (40°C)	Pass		
<b>FLAMMABILITY AND OUTGASSING</b>				
Flammability	UL 94HBF (File E20305) (Pass ≥) MVSS 302 (Pass ≥) CSA Comp HBF (File 188149) (Pass ≥)	0.188" - -		
Fogging	SAE J-1756 3 hrs @ 212°F (100°C)	-		
Outgassing, Total Mass Loss (TML) %	ASTM E 595-93 24 hrs @ 257°F (125°C) @ <7x10 <sup>3</sup> 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
<b>ENVIRONMENTAL</b>				
Gasketing and Sealing	UL JMST2 (Consisting of UL50 and 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 D 570-95	15	13	6
UV Resistance	ASTM G 53-96	-		
Ozone Resistance	GM 4486P-95	-		
Corrosion Resistance	AMS 3568-91	-		
Mildew/Bacteria Resistance	ASTM G 21	Good		
Staining	ASTM D 925	No Stain		
Skin Contact Irritation	Primary Skin Irritation Test (FHSA)	Pass		

**Notes:** All metric conversions are approximate.  
Additional technical information is available.

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