

PORON® 4701-50 High Modulus Grade (Firm) (replaces 4701-05) **Preliminary Product Properties**

PROPERTY	TEST METHOD	VALUE		
Density , lb. / ft ³ (kg /m ³)	ASTM D3574 - Test A	15 (240)	20 (320)	30 (480)
Tolerance, %		± 10		
Thickness , inches (mm) (see standard availability listing)		0.250 (6,35)	0.062 (1,57) 0.125 (3,18)	0.017 (0,43) 0.031 (0,79) 0.045 (1,14)
Tolerance, %		± 10		± 20
Standard Color , (Code) Note: Special Colors Available		Gray (1637) 4701-50-30017 is offered as standard Black (1604)		
Compression Set , %, max.	ASTM D3574 - Test D @ 73°F (23°C) ASTM D3574 - Test D @ 158°F (70°C) ASTM D3574 - Test J/ Test D after autoclaved 5 hrs. @ 250°F (121°C)	2 10 5		
Compression Force Deflection , psi (kPa)	0.2" / min. Strain Rate Force Measured @ 25% Deflection	8 - 14 (55 - 97)	13 - 23 (90 - 159)	30 - 60 (207 - 415)
Corrosion Resistance	AMS 3568	Pass		
Dimensional Stability , % , max. change	22 hrs. 176°F (80°C) in a forced-air oven	± 2.5		
Flammability	UL 94HBF MVSS302	Listed	Listed	-
Fogging	SAE-J1756 3 hrs. @ 212°F (100°C)	Pass		
Gasketing and Sealing	UL JMST2	Listed		-
Hardness , Durometer	Shore "O"	18	24	55
Outgassing Total Mass Loss (TML), %, max.	ASTM E595 24 hrs. @ 257°F (125°C) @ <7x10 ⁻³ Pa	0.6	0.8	0.9
Collected Volatile Condensable Materials, (CVCM), %		0.04	0.05	0.06
Water Vapor Regain, (WVR), %		0.14	0.25	0.43
Ozone Resistance	GM 4486P	Pass		
Staining	ASTM D925-88	No Stain		
Static Solvent Resistance additional solvent resistance: Antifreeze & Water 50/50 Windshield Washer Solution Electrical Grease Soap & Water 50/50	Specimens immersed for 10 min. in 75% Naptha, 25% 1,1,1-trichloroethane, then allowed to dry completely.	No tackiness or surface deterioration		

Please see reverse side for additional data.

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Preliminary Product Properties - Continued

PROPERTY	TEST METHOD	VALUE		
Density, lb. / ft ³ (kg / m ³)	ASTM D3574 - Test A	15 (240)	20 (320)	30 (480)
Surface Resistivity, ohm/sq. Volume Resistivity, ohm.cm	ASTM D257	6.7 x 10 ¹² 1.8 x 10 ¹²		
Tear Strength, pli (kNm)	ASTM D624	6 (1.1)	11 (1.9)	16 (2.8)
Temperature Resistance Cold Flexibility Embrittlement Recommended Constant Use, max. Recommended Intermittent Use, max.	MIL-P-12420C @ -40°F (-40°C) ASTM D746	Pass -40°F (-40°C) 158°F (70°C) 250°F (121°C)		
Tensile Elongation, % min.	ASTM D3574 - Test E	100	100	90
Tensile Strength, psi, min. (kPa)	ASTM D3574 - Test E	80 (553)	120 (829)	200 (1382)
Coefficient of Thermal Expansion		2.3 - 3.1 x 10 ⁻⁴ in / in / °C		
UV Resistance	AMS G53	Good		
Water Absorption, % wt gain, max. Immersion Testing, % wt gain, max.	AMS 3568 ASTM D570	1.8 12.9	1.7 8.2	1.6 5.2

The above data represents preliminary values. 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. The relative merits of materials for a specific application should be determined by your evaluation.

Notes:

1. All metric conversions are approximate.
2. Microgrinding of materials for improved thickness tolerance is available upon request.
3. 4701-50-30017-1604 has not been tested to MVSS 302.

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