

# AUBURN PRODUCT NEWS

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## **PORON<sup>®</sup> 4790-92 (Extra Soft Slow Rebound)** **Typical Products Properties**

PROPERTY	TEST METHOD	VALUE
<b>Physical</b>		
Density, lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	ASTM D3574 – Test A	15 (240)
Tolerance, %	-	± 10%
Thickness, inches (mm)	-	0.125 (3.18) 0.188 (4.78) 0.250 (6.35) 0.375 (9.53) 0.500 (12.70)
Tolerance, %	-	± 10%
Standard Color, (Code)	-	Black (04)
Compression Set, % Max.	ASTM D1667-90 – Test D @ 73°F (23°C) ASTM D3574-95 – Test D @ 158 F (70°C) ASTM D3574-95 – Test J/Test D After autoclaved 5 hrs. @ 250°F (121°C)	2 10 5
Compression Force Deflection, psi (kPa) Typical psi (kPa)	0.20"/min. Strain Rate. Force Measured @ 25% Deflection	0.3-3.5 (2-24) <b>2 (14)</b>
Resilience by Vertical Rebound Value, %	ASTM D2632-96	4
Dimensional Stability, % max. change	22 hrs. @ 176°F (80°C) in a forced-air oven	± 5%
Hardness, Durometer, Shore "0" Shore "A"	ASTM D2240-97	2 -
Tear Strength, pli, typical (kN/m)	ASTM D624 – Die C	4 (0.7) <b>5 (0.9)</b>
Tensile Elongation, % min.	ASTM D3574 – Test E	120 <b>206</b>
Tensile Strength, psi, min. kPa	ASTM D3574 – Test E	15 (103) <b>30 (207)</b>
<b>Thermal</b>		
Temperature Resistance Recommended Constant Use, max. Recommended Intermittent Use, max.	SAE J-2236 ASTM D 746-98	194°F – (90°C) 250°F – (121°C)
Thermal Conductivity, W/m-C (BTU-in./hr. ft <sup>2</sup> -F)	ASTM C518-98	-
Coefficient of Thermal Expansion	ASTM D257	2.30 X 10 <sup>-4</sup> in./in./°C
Embrittlement	ASTM D 746-98	-4°F (-20°C)
Cold Flexibility	MIL-P-12420D 1991 @ -40°F (40°C)	-
<b>Electrical</b>		
Dielectric Constant, K' ("DK")	ASTM D 150 measurements a 72 F (22 C) relative humidity 50% for 24 hrs.	1.48

datasheet continued on next page...

# PORON<sup>®</sup> 4790-92 (Extra Soft Slow Rebound)

## Typical Products Properties...Continued

<b>Electrical...Continued</b>		
Surface Resistivity, ohm/cm	ASTM D257	10 x 10 <sup>11</sup>
Volume Resistivity, ohm/cm	ASTM D257	8 x 10 <sup>11</sup>
Dielectric Constant, K' ("DK")	ASTM D150 measurements @ 76°F (22°C) relative humidity 50% for 24 hrs.	1.48
Dissipation Factor, tan D ("DF")	ASTM D150	0.04
Dielectric Strength, volts/mil	ASTM D149	50
<b>Flammability and Outgassing</b>		
Flammability	UL 94HBF (File E20305) (Pass ≥) MVSS 302 (Pass ≥) CSA Comp HBF (File 188149) (Pass ≥)	- - -
Fogging	SAE-J1756 3 hrs @ 212°F (100°C)	Pass
Outgassing, Total Mass Loss (TML) %	ASTM E 595-93 24 hrs @ 257°F (125 °) @ 7x10 <sup>3</sup> Pa	1.73
Outgassing, Collected Volatile Condensable Materials (CVCM) %		0.14
Outgassing, Water Vapor Regain (WVR) %		0.71
<b>Environmental</b>		
Gasketing and Sealing	UL JMST2 (Consisting of UL50 and UL508) CAN/CSA – C22.2 No. 94-M91	File MH15464
Water Absorption, Immersion testing, % weight gain, typ.	AMS 3568-95	2
Water Absorption, High Humidity Exposure, % weight gain, typ.	ASTM D 570-95	34
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

The Information contained in this data sheet is intended to assist you in designing with PORON<sup>®</sup> Urethane. 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 on the data sheet will be achieved by a user for a particular purpose. The user should determine the suitability of PORON<sup>®</sup> Urethane for each application.

### Notes:

- 1) All metric conversions are approximate.
- 2) Additional Technical Information is available.