



PORON® Urethane Foams

High Performance Foams Division
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Typical Product Properties

**PO RON® 4790-92-25021 P (Supported)
 Extra Soft – Slow Rebound**

| PROPERTY | TEST METHOD | VALUE |
|--|---|---|
| PHYSICAL | | |
| Density, lb./ft ³ (kg/m ³) | ASTM D3574-95 Test A | 25 (400) |
| Tolerance, % | | ± 10 |
| Thickness, inches (mm) | | 0.021 (0.53) |
| Tolerance, % | | ± 15 |
| Standard Color (Code) | | Black (04) |
| Compression Force Deflection, Range psi (kPa), Typical psi (kPa) | 0.2" / min. Strain Rate Force Measured @ 25% Deflection | 1.25 - 8.5 (8 - 58) 5.3 (37) |
| Compression Set, % max. | ASTM D 1667-90 Test D @ 73°F (23°C) ASTM D 3574-95 Test D @ 158°F (70°C) | 2 10 |
| ELECTRICAL AND THERMAL | | |
| Dielectric Constant, K', "DK" | ASTM D 150 measurements at 72°F (22°C) relative humidity 50% for 24 hrs. | 1.48 |
| Dielectric Strength, volts/mil | ASTM D 149-97a | 50 |
| Dissipation Factor, tan D, "DF" | ASTM D 150-98 | 0.04 |
| Volume Resistivity, ohm-cm | ASTM D 257-99 | 8.0 x 10 ¹¹ |
| Surface Resistivity, ohm/sq. | ASTM D 257-99 | 10.0 x 10 ¹¹ |
| Coefficient of Thermal Expansion | | 2.3 - 3.1 x 10 ⁻⁴ in./in./°C |
| TEMPERATURE RESISTANCE | | |
| Recommended Constant Use, max. | SAE J-2236 | 158°F (70°C) |
| Recommended Intermittent Use, max. | ASTM D 746-98 | 250°F (121°C) |
| Embrittlement | ASTM D 746-98 | -10°F (-12°C) |

Please see reverse side for additional data.



The world runs better with Rogers.

PORON® 4790-92-25021 P (Supported) Continued
Extra Soft – Slow Rebound

| PROPERTY | TEST METHOD | VALUE |
|--|---|-------|
| OUTGASSING | | |
| Fogging | SAE J-1756 | Pass |
| Outgassing | | |
| Total Mass Loss (TML) % | ASTM E 595-93 | 1.44 |
| Collected Volatile Condensable Materials (CVCM) % | 24 hrs @257°F (125°C) @ <7x10 ³ Pa | 0.27 |
| Water Vapor Regain (WVR) % | | 0.44 |
| ENVIRONMENTAL | | |
| Skin Contact | Primary Skin Irritation Test (FHSA) | Pass |
| Water Absorption , High Humidity Exposure, % weight gain, typical | AMS 3568-95 | 2 |
| Water Absorption , Immersion Testing, % weight gain, typical | ASTM D 570-95 | 14 |

The data mentioned above represents results of testing the PORON® urethane foam only. PORON cellular urethane materials are supported by being directly cast onto 2 mil polyester film. Please see physical property data for the film as represented by manufacturer below.

Supporting Material - Clear Polyester Film (PET)

| PROPERTY | TEST METHOD | VALUE |
|---|------------------|---------------------|
| Density , lb./ft ³ (kg/m ³) | ASTM D 1505 | 87 (1395) |
| Tensile Strength , Machine Direction, psi (kg/cm ²) | ASTM D 882 | 30,000 (2,110) |
| Ultimate Elongation , % | ASTM D 882 | 150 |
| Shrinkage , Machine Direction, % (Cross-machine Direction) | 39 min. at 150°C | 1.2 (0.0) |
| Yield Strength (F5) , psi (kg/cm ²) | ASTM D 882 | 15,000 (1,050) |
| Coefficient of Friction A/B , Kinetic | ASTM D 1894 | 0.40 |
| Modulus , Machine Direction, psi (kg/cm ²) | ASTM D 882 | 500,000 (35,200) |

The information contained in this data sheet is intended to assist you in designing with Rogers PORON Urethane Foams. 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 this data sheet will be achieved by a user for a particular purpose. The user is responsible for determining the suitability of Rogers PORON Urethane Foams for each application.

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

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 4071-0804-PDF, Publication 17-084

