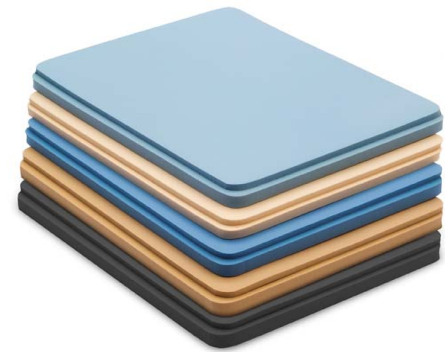


**PORON Medical® Urethanes**

**PORON Medical® Urethanes – Soft Cushioning & Soft Supporting Materials**

PORON Medical® cellular urethanes are engineered, medium density, microcellular (cells are roughly 100 microns in diameter) foam materials. They are used in orthopedic and prosthetic applications, including custom orthotics, custom prefabricated orthotics, prosthetic padding and other biomechanical supports.

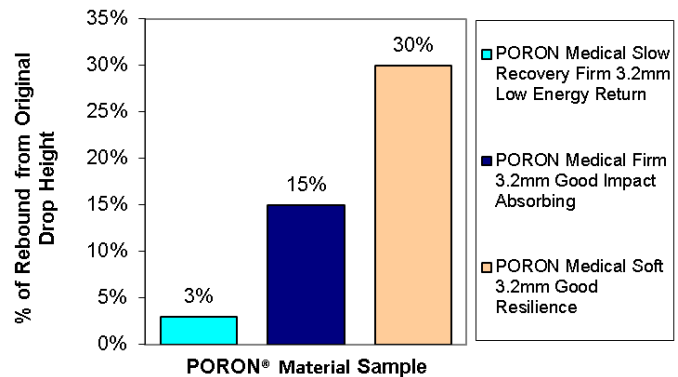
- Long-term Comfort
- Compression Set Resistance
- Open-Cell – Breathable
- Microcellular Structure
- Fungal Resistant



PORON® Soft Supporting materials have a density of 20 pounds per cubic foot, and are available in thicknesses from 1.5mm (1/16") up to 12.7mm (1/2").

PORON® Soft Cushioning materials have a density of 15 pounds per cubic foot, and are available in thicknesses from 3mm (1/8") up to 12.7mm (1/2").

Other combinations are also available upon special order.



**Continued on reverse**

The information contained in this data sheet is intended to assist you in designing with Rogers PORON Medical Urethanes. 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 is responsible for determining the suitability of Rogers PORON Medical Urethanes for each application. The Rogers logo, The world runs better with Rogers., PORON, PORON Medical and BISCO are licensed trademarks of Rogers Corporation. © 2005-2007, 2013. 2015 Rogers Corporation, All rights reserved. Printed in U.S.A. 0315-PDF, Publication #10-022

# PORON Medical® Urethanes – Soft Cushioning & Soft Supporting Materials

## Typical Physical Properties

PROPERTY	TEST METHOD	PRODUCT	
		PORON MS Soft - Cushioning	PORON MS Soft - Supporting
Formulation		PORON MS Soft - Cushioning	PORON MS Soft - Supporting
Standard Thickness		See Product Availability	
Tolerance, %		± 10	
Standard Width, mm (inch)		1372 (54)	
Standard Colors (Codes)		Neutral (05), Aquamarine (72)	Beige (40), Light Blue (14) Onyx (89)
Density, kg/m <sup>3</sup> (lb/ ft <sup>3</sup> )	ASTM D 3574	240 (15)	320 (20)
Specific Gravity		0.240	0.320
Tolerance, %		± 10	
Compression Set, % max.	ASTM D 3574 @ 70°C (158°F)	10	
Compression Force Deflection, kPa (psi)	ASTM D 3574 @ 25% Deflection	27 - 55 (4 - 8)	41 - 97 (6 - 14)
Resilience, Shore Instrument Resiliometer, Typical (Ball Rebound Tester)	ASTM D 2632, Vertical Rebound	24	25
Tear Strength, kN/m (pli), min.	ASTM D 624	0.5 (3)	0.9 (5)
Elongation, % min.	ASTM D 3574	100	
Tensile Strength, kPa (psi), min.	ASTM D 3574	276 (40)	448 (65)
Antimicrobial, Fungal Resistance	ASTM G 21	Does not promote fungal growth	
Surface Contact - Medical Device Primary Skin Irritation	ISO10993-10, 2010	Pass	
Air Permeability	Gurley Porosity Meter	Open-Cell – Breathable	
Water Vapor Transfer, Typical g/m <sup>2</sup> /24hrs (g/ft <sup>2</sup> /24hrs)	Based on ASTM E 96	200 (19)	
Water Absorption, Typical % Wt Gain	Based on ASTM D 570	< 20	
Chemical Resistance		PORON® Urethanes are unaffected by mild organic acids and bases. They show modest swelling with oils and greases and other linear hydrocarbons. Strongly polar solvents will greatly swell PORON Urethanes. In most cases, physical properties recover to a great extent as the solvents evaporate.	
Temperature Resistance, max. Recommended Constant Use	SAE J-2236	90°C (194°F)	
Hydrolysis Resistance, Tensile Strength, kPa (psi) Compression Set, % max.	ASTM D 3574 Test J / Test D after autoclaved 5 hrs @ 121°C (250°F)	Good Resistance, 5	

\* ISO 10993 certifications are specific to colors and density. Consult ISO 10993-1:2003(E) Guidelines for further detail.

### Notes:

1. Typical values are a representation of an average value for the population of the property. For specification values, contact Rogers Corporation.
2. All metric conversions are approximate.
3. Additional technical services are available.



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