

PORON Medical® Urethanes

**PORON Medical® Urethanes – Firm – Energy Absorbing
Typical Physical Properties**

PROPERTY	TEST METHOD	PRODUCT	
Formulation		PORON MF, Energy Absorbing	
Density, kg/m ³ , (lb. / ft ³)	ASTM D 3574-95 Test A	15 (240)	17 (272)
Specific Gravity		0.24	0.27
Tolerance, %		± 10	
Standard Thickness		See Product Availability	
Tolerance, %		± 10	
Standard Width, mm (inch)		1327 (54)	
Standard Colors (Code)		Panel Tan (41), Navy (11)	
Air Permeability	Gurley Densometer	Open-Cell – Breathable	
Compression Set, % max.	ASTM D 3574 Test D @ 70°C (158°F)	10	
Compression Force Deflection, psi, (kPa)	0.2"/min. Strain Rate Force Measured @ 25% Deflection	6 – 16 (41-111)	8 – 20 (55 - 138)
Hardness, Durometer	Shore "O"	18	20
Hydrolysis Resistance, Compression Set, % max.	ASTM D 3574 Test J / Test D after autoclaved 5 hrs @ 121°C (250°F)	Good Resistance 5	
Resilience, Shore Instrument Resiliometer, avg. (Ball Rebound Tester)	ASTM D 2632-96, Vertical Rebound	14	15
Water Vapor Transfer, Typical g/m ² /24hrs (g/ft ² /24hrs)	Based on ASTM E 96-00	200 (> 19)	
Water Absorption, Typical % Weight Gain	Based on ASTM D 570	< 20	
Antimicrobial, Fungal Resistance	ASTM G 21	Does not promote fungal growth	
Skin Contact Primary Skin Irritation	ISO10993-10, 2010	Pass	
Tear Strength, pli, min. (kN/m)	ASTM D 624 Die C	6 (1.1)	10 (1.8)
Tensile Elongation, % min.	ASTM D 3574 Test E	100	
Tensile Strength, psi, min. (kPa)	ASTM D 3574 Test E	70 (483)	90 (621)
Temperature Resistance, max Recommended Constant Use Recommended Intermittent Use	ASTM D 746-98	90°C (194°F) 121°C (250°F)	
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.	

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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