

PORON Medical® Urethanes

PORON Medical® Urethanes – *Slow Recovery*
Typical Physical Properties

PROPERTY	TEST METHOD	PRODUCT			
		PORON MSRVS (Very Soft)	PORON MSRS (Soft)	PORON MSRF (Firm)	PORON MSRVF (Very Firm)
Formulation					
Density, kg/m ³ (lb. / ft ³)	ASTM D 3574-95 Test A	15 (240)			
Specific Gravity		0.24			
Tolerance, %		+/- 10			
Standard Thickness		See Product Availability			
Tolerance, %		+/- 10			
Standard Width, mm (inch)		1372 (54)			
Standard Color (Code)		Sea Mist (73)	Light Jade (71)	Patina (79)	Dark Jade (80)
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	0.3 - 3.5 (2 - 24)	1.5 - 6.5 (10 - 45)	3 - 18 (21 - 124)	4 - 22 (27 - 151)
Hardness, Durometer	Shore "O"	12	18	22	30
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 2632-92, Vertical Rebound	4	4	7	8
Water Vapor Transfer, Typical g/m ² /24hrs (g/ft ² /24hrs)	Based on ASTM E 96-00	400 (> 37)			
Water Absorption, Typical % weight gain	Based on ASTM D 570	< 30%			
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	4 (0.7)	5 (0.9)	10 (1.7)	12 (2.1)
Tensile Elongation, % min.	ASTM D 3574 Test E	120		100	
Tensile Strength, psi, min. (kPa)	ASTM D 3574 Test E	15 (104)	40 (276)	80 (552)	100 (689)
Temperature Resistance, max. Recommended Constant Use Recommended Intermittent Use	ASTM D 746-98	70°C (158°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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