



performance
cushioning

PORON[®] Performance Urethanes Preliminary Physical Properties – PORON[®] Dual Layer

PROPERTY	TEST METHOD	PRODUCT		
		Slow Rebound Firm / Performance	Slow Rebound Firm / Performance	Slow Rebound Firm / Plus
Formulation				
Density, lb. / ft ³	ASTM D3574-95 Test A	17	15	17
Specific Gravity		0.27	0.24	0.27
Tolerance, %		± 10		
Standard Thickness, mm		3mm	4mm	5mm
Tolerance, %		± 10		
Standard Color		Slow Rebound - SRS Formulation – Salmon (47) Performance - F Formulation – Royal Blue (13) Plus - S Formulation – Butterscotch (00)		
Air Permeability	Gurley Densometer	Open Cell – Breathable		
Compression Set, % max.	ASTM D3574 Test D @ 158°F (70°C)	10		
Compression Force Deflection, psi, (kPa)	0.2"/min. Strain Rate Force Measured @ 25% Deflection	7 – 15 (48-103)	4 – 13 (28-90)	3 – 12 (21-83)
Hardness, Durometer	Shore "O"	19	15	15
Hydrolysis Resistance, Compression Set, % Max	ASTM D3574 Test J / Test D after autoclaved 5 hrs @ 258 (121°C)	Good Resistance 5		
Resilience, Shore Instrument Resiliometer, avg. (Ball Rebound Tester)	ASTM D 2632-96, Vertical Rebound (Slow Rebound surface)	9	9	12
Water Vapor Transfer, Typical g/ft ² /24hrs (g/m ² /24hrs)	Based on ASTM E96-00	> 37 (400)		
Water Absorption, % Avg	Based on ASTM D570	< 30		
Antimicrobial, Fungal Resistance	ASTM G21	Does not promote fungal growth		
Skin Contact	Primary Skin Irritation- FHSA	Pass		
Tear Strength, pli, min. (kN/m)	ASTM D624 Die C	8 (1.4)	7 (1.2)	6 (1.0)
Tensile Elongation, % min.	ASTM D3574 Test E	100	100	120
Tensile Strength, psi, min. (kPa)	ASTM D3574 Test E	119 (821)	92 (636)	90 (621)
Temperature Resistance, max Recommended Constant Use Recommended Intermittent Use	ASTM D746-98	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.		

The above data represent preliminary values. 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. The user should determine the suitability of Rogers PORON Performance Urethanes for each application.

- Notes:
1. All metric conversions are approximate.
 2. Additional technical services available.

