

PORON[®] Performance Urethanes Preliminary Physical Properties – PORON[®] Slow Rebound

PROPERTY	TEST METHOD	PRODUCT			
		PORON SR Very Soft	PORON SR Soft	PORON SR Firm	PORON SR Very Firm
Formulation					
Density, lb. / ft ³	ASTM D3574-95 Test A	15	15	15	15
Specific Gravity		0.24	0.24	0.24	0.24
Tolerance, %		± 10			
Standard Thickness		See Product Availability			
Tolerance, %		± 10			
Standard Color		62 – Red	47 – Salmon	51 – Lambda Red	42 – Cayenne Red
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	0.3 – 3.5 (2–24)	1.5 – 6.5 (10–45)	3 – 14 (21-97)	7 – 18 (48-124)
Hardness, Durometer	Shore "O"	12	18	22	30
Hydrolysis Resistance, Compression Set, % Max	ASTM D3574 Test J / Test D after autoclaved 5 hrs @ 250 (121°C)	Good Resistance 5			
Resilience, Shore Instrument Resiliometer, avg (Ball Rebound Tester)	ASTM D2632-92, Vertical Rebound	4	4	7	8
Water Vapor Transfer, Typical g/ft ² /24hrs (g/m ² /24hrs)	Based on ASTM E96-00	> 37 (400)			
Water Absorption % weight gain, 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	4 (0.7)	5 (0.9)	10 (1.7)	12 (2.1)
Tensile Elongation % min.	ASTM D3574 Test E	120	120	100	100
Tensile Strength psi, min. (kPa)	ASTM D3574 Test E	15 (104)	40 (276)	80 (552)	100 (689)
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 are available.