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PORON® Performance Urethanes

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 | | Slow Rebound Firm / Performance | Slow Rebound Firm / Performance | Slow Rebound Firm / Plus |
| 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 @ 250°F (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.

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