


Microcellular Polyurethane
U7E17

Typical Physical Properties

| PROPERTY | TEST METHOD | VALUE |
|---|---|------------------------------------|
| PHYSICAL | | |
| Density, lb./ft ³ (kg/m ³) Tolerance, % | ASTM D3574 (1,5) | 15 (240) ± 10 |
| Thickness, inches (mm) Tolerance, % | (5,6) | 0.062 - 0.393 (1.6 - 10.0) ± 10 |
| Standard Color (Pantone® code) | - | Black (0426) |
| Compression Force Deflection, psi (kPa) Typical psi (kPa) | ASTM D3489 (1,5) at 25% compression | 4.0 - 8.0 (28 - 55) 5.5 (38) |
| Compression Set, % max. (Typical) | ASTM D3574 Test D (1,3) at 50% compression, 73°F (23°C) | 4 (0.8) |
| | ASTM D3574 Test D (1,3) at 50% compression, 158°F (70°C) | 8 (1.6) |
| | ASTM D3574 Test J2 & Test D (1,3,4) Autoclave then 50% compression, 158°F (70°C) | 5 (2.0) |
| Dimensional Stability, % max. change Typical | 24 hr at 194°F (90°C) | 5 0.3 |
| Tensile Strength, min. psi (kPa) Typical psi (kPa) | ASTM D3574 Test E Die A (5) | 40 (276) 60 (414) |
| Tensile Elongation, % min. Typical | ASTM D3574 Test E Die A (2) | 100 120 |
| Tear Strength, min. pli (kN/m) Typical pli (kN/m) | ASTM D624 Die C (5) | 4 (0.7) 8.0 (1.4) |
| Resilience (Ball Rebound), % | ASTM D3574 Test H | 16 |
| TEMPERATURE RESISTANCE | | |
| Continuous Use Range | SAE-J2236 | -40° to 225°F (107°C) |
| Intermittent Use Maximum | - | 250°F (121°C) |
| Low Temperature Flex | Ford WSS-M2D496 and Chrysler MS-AY 549 | No Cracking |

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| PROPERTY | TEST METHOD | VALUE |
|---|--|--------------------|
| FLAMMABILITY AND OUTGASSING | | |
| Flammability | FMVSS-302 | Pass |
| | ISO 3795 | Pass |
| | UL94HBF | Pass |
| Fogging (gloss), reflectivity visual | SAE J1756 3 hr at 194°F (90°C) | 99 Dry deposits |
| ENVIRONMENTAL | | |
| Water Absorption, %, typical | ASTM D570 | 17 |
| Staining, visual | ASTM D925 | No Staining |
| Solvent Resistance, visual | Immerse in: light naphtha naphtha trichloroethylene 50/50 mix antifreeze & water windshield washer solution electrical grease 50/50 mix soap & water aliphatic hydrocarbon with emulsifier | No Change |
| Gasketing and Sealing | ULJMST2 | See U1E Products |

- (1) Sample size is 1.5 inch diameter by approximately 0.5 inch stack height
- (2) Based on grip separation
- (3) Ct method, percent of original thickness
- (4) Autoclaved for 5 hours at 250°F then test D
- (5) All metric conversions are approximate
- (6) ASTM D3574 method with the following exceptions: 1.5 inch diameter foot on digital thickness indicator with a force loading of 0.9 Newtons (91.8 grams-force) plus the 30 gram weight of the foot

NOTE: Information of a technical nature is based on laboratory tests which either GRISWOLD LLC conducts or sends to an independent laboratory for testing for determination of uses as requested in writing by customer. GRISWOLD LLC believes these to be reliable. However, GRISWOLD LLC has no control over the application of the material to, or part of, the final **product** and **therefore**, GRISWOLD LLC makes **no express or implied warranty of result, fitness or merchantability**. The customer should determine reliability for the end use or particular application.

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