


**Microcellular Polyurethane**
**U7Y30**

## Typical Physical Properties

PROPERTY	TEST METHOD	VALUE
<b>PHYSICAL</b>		
Density, lb./ft <sup>3</sup> (kg/m <sup>3</sup> ) Tolerance, lb./ft <sup>3</sup>	ASTM D3574 (1,6)	30 (481) ± 3
Thickness, inches (mm) Tolerance, %	(6,7)	0.031 (0.79) - 0.062 (1.57) ± 10
Standard Color (Pantone® code)	-	Black (0426)
Compression Force Deflection, psi (kPa) Typical psi (kPa)	TA.TX. Plus Texture Analyzer (5,6) At 25% compression	28 - 48 (193 - 331) 38 (262)
Compression Set, % max. (Typical)	ASTM D3574 Test D (1,3) at 50% compression, 73°F (23°C)	5 (1.9)
	ASTM D3574 Test D (1,3) at 50% compression, 158°F (70°C)	10 (3.7)
	ASTM D3574 Test J2 & Test D (1,3,4) Autoclave then 50% compression, 158°F (70°C)	5 (2.5)
Tensile Strength, min. psi (kPa) Typical psi (kPa)	ASTM D3574 Test E Die A (6)	250 (1724) 400 (2758)
Tensile Elongation, % min. Typical	ASTM D3574 Test E Die A (2)	100 150
Tear Strength, min. pli (kN/m) Typical pli (kN/m)	ASTM D624 Die C (6)	25 (4.4) 40 (7.0)
<b>TEMPERATURE RESISTANCE</b>		
Continuous Use Range	SAE-J-2236	-40°F to 225°F (107°C)
Intermittent Use Maximum	-	250°F (121°C)

- (1) Sample size is 1.5 inch diameter
- (2) Based on grip separation
- (3) Ct method, percent of original thickness
- (4) Autoclaved for 5 hours at 250°F then test D
- (5) Single ply, 5mm probe, at an applied strain rate equivalent to ASTM D3489
- (6) All metric conversions are approximate
- (7) 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.