Lubrizol LifeSciences

TECHNICAL DATA SHEET

Pellethane® 2363-75D TPU

Type: Pellethane 2363-75D is a thermoplastic polyurethane elastomer

Features: USP Class VI[(a)]

Properties	Test Method	Values[(1)]
Physical		
Specific Gravity	ASTM D 792	1.21
Mould Shrinkage (1.6 mm [1/16"] thick plaques), % MD TD		 0.3-0.8 0.3-0.7
Mechanical		
Durometer Hardness, Shore	ASTM D 2240	76D
Tensile Modulus 50% Elongation, MPa (psi) 100% Elongation, MPa (psi) 300% Elongation, Mpa (psi)	ASTM D 412	 - - -
Ultimate Tensile Strength, MPa (psi)	ASTM D 412	40 (5810)
Ultimate Elongation, %	ASTM D 412	380
Elongation Set After Break, %	ASTM D 412	-
Tear Strength, Die "C", KN/m (pli)	ASTM D 624	257 (1470)
Compression Set 22 hours at 25°C (77°F), % 22 hours at 70°C (158°F), %	ASTM D 395 Method B	 - -
Taber Abrasion Resistance 1000g, 1000 cycles; H-22 wheel (coarser), mg	ASTM D 1044	 55
Flexural Modulus, MPa (psi)	ASTM D 790	1300 (190,000)
Thermal		
Vicat Softening Temperature, ºC (ºF)	ASTM D 1525	116 (241)
Coefficient of Linear Thermal Expansion, 10^{-6}mm/mm/ ºC	ASTM D 696	88.7 (49.3, 10^{-6} in/in/ ºF)
Glass Transition Temperature, ºC (ºF)	DSC	-
Rheological		
Melt Index, 224 ºC, 5.0 kg, kg/10 min	ASTM D 1238	28
Processing Information		
Recommended Drying Temperature, ºC (ºF)		100-110 (210-230)
Recommended Melt Temperature (Molding), ºC (ºF)		210-225 (410-440)
Recommended Melt Temperature (Extrusion), ºC (ºF)		205-220 (400-430)
Recommended Mold Temperature, ºC (ºF)		15-60 (60-140)

(a) This resin has undergone biocompatibility testing in accordance with US Pharmacopoeia XXII Class VI guidelines

† Typical Values, not to be construed as specifications. Users should confirm by their own tests.

Lubrizol

Lubrizol Advanced Materials, Inc. / 9911 Brecksville Road, Cleveland, Ohio 44141-3247 / 216.447.5000