

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		0.3-0.8
TD		0.3-0.7
Mechanical		
Durometer Hardness, Shore	ASTM D 2240	76D
Tensile Modulus		
50% Elongation, MPa (psi)	ASTM D 412	-
100% Elongation, MPa (psi)		-
300% Elongation, Mpa (psi)		-
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), %	ASTM D 395	-
22 hours at 70°C (158°F), %	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, °C (°F)	ASTM D 1525	116 (241)
Coefficient of Linear Thermal Expansion, 10 ⁻⁶ mm/mm/°C	ASTM D 696	88.7 (49.3, 10 ⁻⁶ in/in/°F)
Glass Transition Temperature, °C (°F)	DSC	-
Rheological		
Melt Index, 224 °C, 5.0 kg, kg/10 min	ASTM D 1238	28
Processing Information		
Recommended Drying Temperature, °C (°F)		100-110 (210-230)
Recommended Melt Temperature (Molding), °C (°F)		210-225 (410-440)
Recommended Melt Temperature (Extrusion), °C (°F)		205-220 (400-430)
Recommended Mold Temperature, °C (°F)		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.

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