



# Pellethane® 2363-65D TPU

**Type:** Pellethane 2363-65D is a thermoplastic polyurethane elastomer

**Features:** USP Class VI<sup>(a)</sup>

Properties	Test Method	Values <sup>(1)</sup>
<b>Physical</b>		
Specific Gravity	ASTM D 792	1.17
Mould Shrinkage (1.6 mm [1/16"] thick plaques), %		
MD		0.7-0.9
TD		0.8-0.9
<b>Mechanical</b>		
Durometer Hardness, Shore	ASTM D 2240	62D
Tensile Modulus		
50% Elongation, MPa (psi)	ASTM D 412	16.2 (2350)
100% Elongation, MPa (psi)		20.0 (2900)
300% Elongation, Mpa (psi)		34.5 (5000)
Ultimate Tensile Strength, MPa (psi)	ASTM D 412	44.5 (6460)
Ultimate Elongation, %	ASTM D 412	450
Elongation Set After Break, %	ASTM D 412	50
Tear Strength, Die "C", KN/m (pli)	ASTM D 624	193 (1100)
Compression Set		
22 hours at 25°C (77°F), %	ASTM D 395 Method B	30
22 hours at 70°C (158°F), %		35
Taber Abrasion Resistance, 1000g, 1000 cycles; H-22 wheel (coarser), mg	ASTM D 1044	105
Flexural Modulus, MPa (psi)	ASTM D 790	221 (32,000)
<b>Thermal</b>		
Vicat Softening Temperature, °C ( °F)	ASTM D 1525	107 (225)
Coefficient of Linear Thermal Expansion, 10 <sup>-6</sup> mm/mm/ °C	ASTM D 696	104 (57.5)10 <sup>-6</sup> in/in/ °F
Glass Transition Temperature, °C ( °F)	DSC	-
<b>Rheological</b>		
Melt Index, 224 °C, 5.0kg, g/10 min	ASTM D 1238	40
<b>Processing Information</b>		
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 Pharmacopeia XXII Class VI guidelines.

(1) Typical Values, not to be construed as specifications. Users should confirm results by their own tests.

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