

Isoplast® 2530 ETPU

Type: Isoplast® 2530 is an engineering thermoplastic polyurethane resin for medical applications.

Features: USP Class VI ⁽¹⁾

Properties	Test Method	Values ⁽¹⁾
Physical		
Mould Shrinkage, %	ASTM D 955	0.4-0.6
Water Absorption, 24 hours at 23°C, %	ASTM D 570	0.13
Specific Gravity, g/cm ³	ASTM D 792	1.20
Mechanical		
Tensile Strength at Yield, MPa	ASTM D 638	63
Tensile Strength at Break, MPa	ASTM D 638	69
Elongation at Yield, %	ASTM D 638	6
Elongation at Break, %	ASTM D 638	160
Tensile Modulus, MPa	ASTM D 638	1,900
Flexural Strength, MPa	ASTM D 790	90
Flexural Modulus, MPa	ASTM D 790	2,300
Izod Impact Strength 3.2 mm; 23°C, J/m 3.2 mm; -40°C, J/m 6.4 mm, 23°C, J/m	ASTM D 256	85 59 -
Instrumented Dart Impact @ 23°C, J @ -29°C, J	ASTM D 3763	80 75
Rockwell Hardness R Scale M Scale	ASTM D785	121 55
Thermal		
Heat Deflection Temperature Under Load HDT/B (0.46 MPa) unannealed, °C HDT/B (0.46 MPa) annealed, °C HDT/A (1.8 MPa) unannealed, °C HDT/A (1.8 MPa) annealed, °C	ASTM D 648	81 93 75 89
Vicat Temperature, °C	ASTM D 1525	101
Coefficient of Linear Thermal Expansion	ASTM D 696	- K ⁻¹ x 10 ⁻⁵



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Properties	Test Method	Values ⁽¹⁾
Thermal		
Gardner 60° Gloss, %	ASTM D 823	-
Light Transmission, %	ASTM D 1003	93
Yellowness Index	ASTM D 1925	10
Processing Information		
Recommended Drying Temperature, °C		85-91
Recommended Melt Temperature, °C		221-243
Recommended Mould Temperature, °C		66-82

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

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



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