

Technical Data Sheet

Type: Isoplast® 302EZ is an engineering thermoplastic resin.

Features: NSF Standard 61 Certified

Properties	Test Method	English		S.I.	
		Values [†]	Units	Values [†]	Units
Physical					
Mold Shrinkage	ASTM D 955	0.004-0.006	in/in	0.004-0.006	mm/mm
Specific Gravity	ASTM D 792	1.20		1.20	
Mechanical					
Tensile Strength at Yield	ASTM D 638	12,000	psi	83	MPa
Tensile Strength at Break	ASTM D 638	10,000	psi	69	MPa
Elongation at Yield	ASTM D 638	9	%	9	%
Elongation at Break	ASTM D 638	130	%	30	%
Tensile Modulus	ASTM D 638	280,000	psi	1,900	MPa
Flexural Strength	ASTM D 790	14,000	psi	97	MPa
Flexural Modulus	ASTM D 790	330,000	psi	2,300	MPa
Izod Impact Strength Notched, 1/8" (3.2 mm), 73°F (23°C) Notched, 1/8" (3.2 mm), -40°F (-40°C)	ASTM D 256	2 1.1	ft-lb/in ft-lb/in	107 59	J/m J/m
Instrumented Dart Impact Total Energy at 73°F (23°C)	ASTM D 3763	600	in-lb	68	J
Rockwell Hardness R Scale M Scale	ASTM D 648	124 92		124 92	
Thermal					
Deflection Temperature Under Load 66 psi (0.45 MPa), unannealed 66 psi (0.45 MPa), annealed 264 psi (1.8 MPa), unannealed 264 psi (1.8 MPa), annealed	ASTM D 648	270 290 240 280	°F °F °F °F	132 143 116 138	°C °C °C °C
Vicat Temperature	ASTM D 1525	297	°F	147	°C
Coefficient of Linear Thermal Expansion	ASTM D 696	3.2	10 ⁻⁵ in/in/°F	5.8	10 ⁻⁵ mm/mm/°C
Optical					
Light Transmission	ASTM D 1003	88	%	88	%
Yellowness Index	ASTM D 1925	40		40	
Processing Information					
Recommended Drying Temperature		260-280	°F	127-138	°C
Recommended Melt Temperature		460-500	°F	238-260	°C
Recommended Mold Temperature		200-250	°F	93-121	°C

[†]Typical values, not to be construed as specifications. Users should confirm results by their own tests.

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