



Isoplast® 302EZ TP

Lubrizol Advanced Materials, Inc. - Engineering Thermoplastic Polyurethane

Wednesday, November 6, 2019

General Information

Product Description

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

Features: NSF Standard 61 Certified

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Agency Ratings	• NSF STD-61		
Forms	• Pellets		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	276000	psi	ASTM D638
Tensile Strength (Yield)	12000	psi	ASTM D638
Tensile Strength (Break)	10000	psi	ASTM D638
Tensile Elongation (Yield)	9.0	%	ASTM D638
Tensile Elongation (Break)	30	%	ASTM D638
Flexural Modulus	334000	psi	ASTM D790
Flexural Strength	14100	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°F, 0.126 in	1.1	ft-lb/in	
73°F, 0.126 in	2.0	ft-lb/in	
Instrumented Dart Impact (73°F, Total Energy)	602	in-lb	ASTM D3763
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ASTM D785
M-Scale	92		
R-Scale	124		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	270	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Annealed)	289	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	241	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Annealed)	280	°F	ASTM D648
Vicat Softening Temperature	297	°F	ASTM D1525
CLTE - Flow	3.2E-5	in/in/°F	ASTM D696
Optical	Nominal Value	Unit	Test Method
Transmittance	88.0	%	ASTM D1003
Yellowness Index	40	YI	ASTM D1925

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature	261 to 280	°F
Processing (Melt) Temp	460 to 500	°F
Mold Temperature	199 to 250	°F

Notes

¹ Typical properties: these are not to be construed as specifications.