

Technical Data

Product Description

Type: Isoplast® 202EZ is an engineering thermoplastic polyurethane resin.

Feature: NSF Standard 61 Certified

General

Material Status	• Commercial: Active
Literature ¹	• Brochure - TPU for the food processing industry (English)
Search for UL Yellow Card	• Lubrizol Advanced Materials, Inc. • Isoplast®
Availability	• Asia Pacific • Latin America • North America
Agency Ratings	• NSF STD-61
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.20	1.20 g/cm ³	ASTM D792
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3 in/in	0.40 to 0.60 %	ASTM D955

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	261000 psi	1800 MPa	ASTM D638
Tensile Strength			ASTM D638
Yield	10000 psi	69.0 MPa	
Break	9140 psi	63.0 MPa	
Tensile Elongation			ASTM D638
Yield	9.0 %	9.0 %	
Break	90 %	90 %	
Flexural Modulus	319000 psi	2200 MPa	ASTM D790
Flexural Strength	13100 psi	90.0 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-40°F (-40°C), 0.126 in (3.20 mm)	3.0 ft·lb/in	160 J/m	
73°F (23°C), 0.126 in (3.20 mm)	10 ft·lb/in	530 J/m	
Instrumented Dart Impact			ASTM D3763
-20°F (-29°C)	301 in·lb	34.0 J	
73°F (23°C)	398 in·lb	45.0 J	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	261 °F	127 °C	
66 psi (0.45 MPa), Annealed	289 °F	143 °C	
264 psi (1.8 MPa), Unannealed	241 °F	116 °C	
264 psi (1.8 MPa), Annealed	280 °F	138 °C	
Vicat Softening Temperature	291 °F	144 °C	ASTM D1525

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	257 to 275 °F	125 to 135 °C
Processing (Melt) Temp	464 to 500 °F	240 to 260 °C
Mold Temperature	203 to 248 °F	95 to 120 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

