

## Lubrizol Isoplast® 300 Engineering Thermoplastic Polyurethane Resin

Category : Polymer , Thermoplastic , Polyurethane, TP

### Material Notes:

Type: Isoplast® 300 is an engineering thermoplastic polyurethane resin. Appearance: Clear transparent pellets Application: Sheet extrusion, composite structures for industrial and consumer goods, injection molded parts. Features: The Isoplast 300U ETPU contains a special UV stabilizer package. Available in Americas, Europe, Middle East, Africa, India and Asia Information Provided by The Lubrizol Corporation

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Lubrizol-Isoplast-300-Engineering-Thermoplastic-Polyurethane-Resin.php](http://www.lookpolymers.com/polymer_Lubrizol-Isoplast-300-Engineering-Thermoplastic-Polyurethane-Resin.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.21 g/cc	1.21 g/cc	ISO 1183
Water Absorption	0.15 %	0.15 %	ASTM D570
	@Temperature 23.0 °C, Time 86400 sec	@Temperature 73.4 °F, Time 24.0 hour	
Linear Mold Shrinkage	0.050 - 0.060 cm/cm	0.050 - 0.060 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	83	83	ISO 868
	@Time 1.00 sec	@Time 0.000278 hour	
Tensile Strength at Break	64.0 MPa	9280 psi	ISO 527-2/1A/5
Tensile Strength, Yield	63.0 MPa	9140 psi	ISO 527-2/1A/5
Elongation at Break	170 %	170 %	ISO 527-2/1A/5
Elongation at Yield	7.0 %	7.0 %	ISO 527-2/1A/5
Modulus of Elasticity	2.13 GPa	309 ksi	ISO 527-2/1A/1
Flexural Strength	85.0 MPa	12300 psi	ISO 178
Flexural Modulus	1.98 GPa	287 ksi	ISO 178
Izod Impact, Notched (ISO)	5.70 kJ/m <sup>2</sup>	2.71 ft-lb/in <sup>2</sup>	ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	8.20 kJ/m <sup>2</sup>	3.90 ft-lb/in <sup>2</sup>	ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	79.0 °C	174 °F	Method B; ISO 75

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	69.0 °C	156 °F	Method A, ISO 75
Vicat Softening Point	96.0 °C	205 °F	ISO 360 (A50)
Glass Transition Temp, Tg	90.0 °C	194 °F	DSC

Optical Properties	Metric	English	Comments
Yellow Index	<= 15 %	<= 15 %	ASTM D1925
Transmission, Visible	92 %	92 %	ASTM D1003

Processing Properties	Metric	English	Comments
Nozzle Temperature	225 - 235 °C	437 - 455 °F	Injection
Zone 1	205 - 215 °C	401 - 419 °F	Extrusion
	205 - 215 °C	401 - 419 °F	Injection
Zone 2	210 - 220 °C	410 - 428 °F	Extrusion
	215 - 225 °C	419 - 437 °F	Injection
Zone 3	215 - 225 °C	419 - 437 °F	Extrusion
	220 - 230 °C	428 - 446 °F	Injection
Zone 4	220 - 230 °C	428 - 446 °F	Extrusion
	225 - 235 °C	437 - 455 °F	Injection
Adapter Temperature	225 - 235 °C	437 - 455 °F	(5) Extrusion
Die Temperature	230 - 240 °C	446 - 464 °F	(6) Extrusion
	230 - 240 °C	446 - 464 °F	(7) Tip, Extrusion
Mold Temperature	65.0 - 85.0 °C	149 - 185 °F	Injection

## Contact Songhan Plastic Technology Co.,Ltd.

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