

Ineos ABS Lustran® 451 ABS, Injection Molding Grade

Category : Polymer , Thermoplastic , ABS Polymer , Acrylonitrile Butadiene Styrene (ABS), Molded

Material Notes:

Lustran® ABS 451 is a soft flowing, medium impact injection molding resin designed with a unique balance of impact, heat resistance, flow, and gloss.

Order this product through the following link:

http://www.lookpolymers.com/polymer_ineos-ABS-Lustran-451-ABS-Injection-Molding-Grade.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.06 g/cc	1.06 g/cc	ASTM-D792
Linear Mold Shrinkage	0.0040 - 0.0060 cm/cm	0.0040 - 0.0060 in/in	ASTM-D955
Melt Flow	4.4 g/10 min @Load 3.80 kg, Temperature 230 °C	4.4 g/10 min @Load 8.38 lb, Temperature 446 °F	ASTM-D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	107	107	ASTM-D785
Tensile Strength, Yield	42.7 MPa	6200 psi	ASTM-D638
Tensile Modulus	2.62 GPa	380 ksi	ASTM-D638
Flexural Yield Strength	74.5 MPa	10800 psi	ASTM-D790
Flexural Modulus	2.59 GPa	375 ksi	ASTM-D790
Izod Impact, Notched	0.694 J/cm @Thickness 3.17 mm, Temperature -17.8 °C	1.30 ft-lb/in @Thickness 0.125 in, Temperature 0.000 °F	ASTM-D256
	1.82 J/cm @Thickness 3.17 mm, Temperature 22.8 °C	3.40 ft-lb/in @Thickness 0.125 in, Temperature 73.0 °F	ASTM-D256

Thermal Properties	Metric	English	Comments
CTE, linear	82.8 µm/m-°C	46.0 µin/in-°F	ASTM-D696
Deflection Temperature at 1.8 MPa (264 psi)	80.6 °C @Thickness 12.7 mm	177 °F @Thickness 0.500 in	Unannealed; ASTM-D648
	102 °C @Thickness 12.7 mm	215 °F @Thickness 0.500 in	Annealed (24h @ 185°F); ASTM-D648

Thermal Properties Vicat Softening Point	Metric 95.1 Â°C	English 205 Â°F	Comments 120A °C/hour, ASTM-D1525
	@Load 1.00 kg	@Load 2.20 lb	
Flammability, UL94	HB	HB	
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	HB	HB	
	@Thickness 3.00 mm	@Thickness 0.118 in	

Processing Properties	Metric	English	Comments
Melt Temperature	232 - 274 Â°C	450 - 525 Â°F	Injection Molding
Mold Temperature	26.7 - 65.6 Â°C	80.0 - 150 Â°F	Injection Molding
Drying Temperature	71.1 - 76.7 Â°C	160 - 170 Â°F	4 hours
	82.2 - 87.8 Â°C	180 - 190 Â°F	2 hours
Dew Point	<= -28.9 Â°C	<= -20.0 Â°F	inlet air
Back Pressure	0.000 - 0.172 MPa	0.000 - 25.0 psi	Injection Molding
Cushion	<= 0.317 cm	<= 0.125 in	Injection Molding

Descriptive Properties	Value	Comments
Injection Speed	Moderate to High	Injection Molding
Screw Compression Ratio	2.5:1	Injection Molding
Screw Length-to-Diameter Ratio	>= 20:1	Injection Molding
Screw Speed	Moderate, Injection Molding	
Shot Weight-to-Machine Capacity Ratio	0.5-0.75	Injection Molding

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China