

Diamond Abs Diamaloy ABS Med Izod

Acrylonitrile Butadiene Styrene

LyondellBasell Industries

Engineering Plastics

General			
Features	High Impact Resistance		
Agency Ratings	EC 1907/2006 (REACH)	EU 2002/96/EC (WEEE)	
RoHS Compliance	RoHS Compliant		
Forms	Pellets		
Processing Method	Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.05	1.05 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹			ASTM D1238
200°C/5.0 Kg	2.0 g/10 min	2.0 g/10 min	
230°C/3.8 Kg	5.0 g/10 min	5.0 g/10 min	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	2300 psi	15.9 MPa	ASTM D638
Tensile Strength ² (Yield)	6500 psi	44.8 MPa	ASTM D638
Flexural Modulus - Tangent ³	328000 psi	2260 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.125 In (3.18 Mm)	5.7 ft·lb/in	300 J/m	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	106	106	ASTM D785

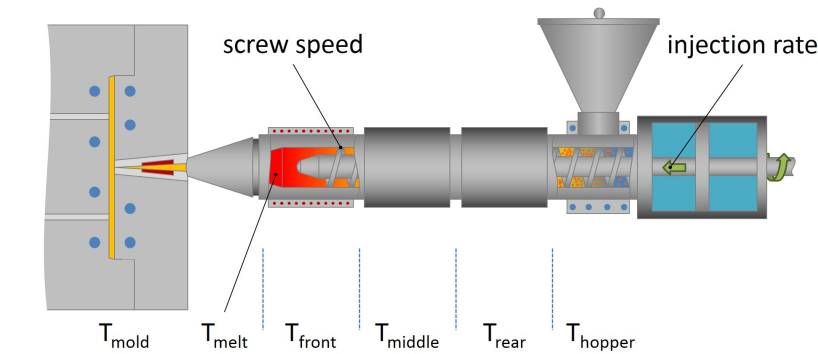
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed, 0.125 In (3.18 Mm)	171 °F	77.2 °C	
264 Psi (1.8 Mpa), Annealed, 0.125 In (3.18 Mm)	201 °F	93.9 °C	
Vicat Softening Temperature	219 °F	104 °C	ASTM D1525 ⁴

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 In (1.5 Mm))	HB	HB	UL 94



Diamond Abs Diamaloy ABS Med Izod

Acrylonitrile Butadiene Styrene
LyondellBasell Industries
Engineering Plastics



Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 to 185 °F	80 to 85 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.10 %	0.10 %
Rear Temperature	374 to 482 °F	190 to 250 °C
Middle Temperature	374 to 482 °F	190 to 250 °C
Front Temperature	374 to 482 °F	190 to 250 °C
Mold Temperature	104 to 176 °F	40 to 80 °C
Injection Rate	Moderate-Fast	Moderate-Fast

Notes

- ¹ Procedure A
- ² 2.0 in/min (51 mm/min)
- ³ 0.050 in/min (1.3 mm/min)
- ⁴ Loading 1 (10 N)

Notes

These are typical property values not to be construed as specification limits.

