Technical Data Sheet

Diamond Abs 7501

Acrylonitrile Butadiene Styrene
LyondellBasell Industries
Engineering Plastics

General		
Features	• Ultra High Impact Resistance	
Agency Ratings	• EC 1907/2006 (REACH)	• EU 2002/96/EC (WEEE)
RoHS Compliance	• RoHS Compliant	
UL File Number	• E150937	
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.04	1.04 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) [1] (230°c/3.8 Kg)	3.6 g/10 min	3.6 g/10 min	ASTM D1238
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength [2] (Yield)	6200 psi	42.7 MPa	ASTM D638
Flexural Modulus - Tangent [3]	285000 psi	1970 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)	7.5 ft·lb/in	400 J/m	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Rockwell Hardness (R-scale)	101	101	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)	199 °F	92.8 °C	
Vicat Softening Temperature	217 °F	103 °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

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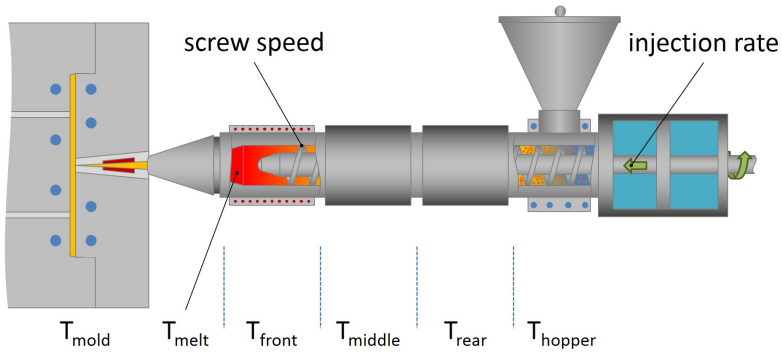

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 to 185 °F	80 to 85 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.10 %	0.10 %
Rear Temperature	374 to 482 °F	190 to 250 °C
Middle Temperature	374 to 482 °F	190 to 250 °C
Front Temperature	374 to 482 °F	190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