

Technical Data Sheet

Diamaloy Abspc 9901

Polycarbonate + ABS
LyondellBasell Industries
Engineering Plastics

General			
Features	• Ultra High Impact Resistance		
UL File Number	• E119088		
Processing Method	• Injection Molding		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.12	1.12 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹			ASTM D1238
200°C/5.0 Kg	0.80 g/10 min	0.80 g/10 min	
230°C/3.8 Kg	3.9 g/10 min	3.9 g/10 min	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ² (Injection Molded)	387000 psi	2670 MPa	ASTM D638
Tensile Strength ³ (Yield)	8000 psi	55.2 MPa	ASTM D638
Flexural Modulus	310000 psi	2140 MPa	ASTM D790
Flexural Strength ⁴ (Break)	10300 psi	70.7 MPa	ASTM D790A
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.125 In (3.18 Mm)	11 ft·lb/in	590 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	112	112	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)	194 °F	90.0 °C	
264 Psi (1.8 Mpa), Annealed, 0.125 In (3.18 Mm)	212 °F	100 °C	
Vicat Softening Temperature	257 °F	125 °C	ASTM D1525 ⁵
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	194 to 212 °F	90 to 100 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Suggested Shot Size	40 to 70 %	40 to 70 %
Rear Temperature	446 to 500 °F	230 to 260 °C
Middle Temperature	455 to 509 °F	235 to 265 °C
Front Temperature	460 to 522 °F	238 to 272 °C
Nozzle Temperature	460 to 522 °F	238 to 272 °C
Processing (Melt) Temp	460 to 522 °F	238 to 272 °C
Mold Temperature	104 to 212 °F	40 to 100 °C
Back Pressure	50.0 to 150 psi	0.345 to 1.03 MPa

Notes

¹ Procedure A

² Type I

³ 2.0 in/min (51 mm/min)

⁴ Method I (3 point load), Type I

⁵ Loading 1 (10 N)

Notes

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