

Technical Data Sheet



Diamaloy Abspc 7000M

Polycarbonate + ABS
LyondellBasell Industries
Engineering Plastics

Product Description

Diamaloy ABSPC 7000M resin is a non-reinforced, naturally opaque and is available in custom colors. High heat and impact resistance. USP Class VI Medical Grade.

General

Material Status	• Commercial: Active
Availability	• North America
Features	• High Heat Resistance • High Impact Resistance
Uses	• Medical/Healthcare Applications
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.17	1.17 g/cm ³	ASTM D792A
Melt Mass-Flow Rate (MFR) ¹ (265°C/5.0 kg)	23 g/10 min	23 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ² (Injection Molded)	330000 psi	2280 MPa	ASTM D638
Tensile Strength ³ (Yield)	7500 psi	51.7 MPa	ASTM D638
Flexural Modulus ⁴	330000 psi	2280 MPa	ASTM D790A
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.125 in (3.18 mm))	10 ft-lb/in	530 J/m	ASTM D256A
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	230 °F	110 °C	ASTM D648
Vicat Softening Temperature	293 °F	145 °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 - Desiccant Dryer	200 °F	93 °C
Drying Time - Desiccant Dryer	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Rear Temperature	430 to 450 °F	221 to 232 °C
Middle Temperature	440 to 455 °F	227 to 235 °C
Front Temperature	480 to 500 °F	249 to 260 °C
Nozzle Temperature	480 to 505 °F	249 to 263 °C
Mold Temperature	150 to 175 °F	66 to 79 °C

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Notes

¹ Procedure A

² Type I

³ Type I, 2.0 in/min (51 mm/min)

⁴ Method I (3 point load), 0.050 in/min (1.3 mm/min)

⁵ Rate B (120°C/h), Loading 1 (10 N)

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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