Technical Data Sheet

Diamaloy ABSPC 9901 1002NAT

Polycarbonate + ABS

Product Description

Diamaloy ABSPC 9901 1002NAT is a Polycarbonate + ABS material and is typically used in Injection Molding applications. Features include: Ultra High Impact Resistance.

Processing Method	Injection Molding
Attribute	Ultra High Impact Resistance

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(200 °C/5.0 kg, Procedure A)	0.80	g/10 min	ASTM D1238
(230 °C/3.8 kg, Procedure A)	3.9	g/10 min	ASTM D1238
Density - Specific Gravity	1.12	g/cm³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	55.2	MPa	ASTM D638
Flexural Modulus	2140	MPa	ASTM D790
Tensile Modulus, (Injection Molded, Type I)	2670	MPa	ASTM D638
Flexural Strength at Break, (Method I (3 point load), Procedure A, Type I)	70.7	MPa	ASTM D790
Impact			
Notched Izod Impact, (23 °C, 3.18 mm)	590	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	112		ASTM D785
Thermal			
Vicat Softening Temperature, (Loading 1 (10 N))	125	°C	ASTM D1525
Deflection Temperature Under Load Annealed (264 psi), (3.18 mm)	100	°C	ASTM D648
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm)	90.0	°C	ASTM D648
UL Information			
Flame Rating, (1.5 mm)	HB		UL 94
UL File Number	E119088		

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	90 to 100	°C
Suggested Max Moisture	0.02	%
Nozzle Temperature	238 to 272	°C
Processing (Melt) Temp	238 to 272	°C
Front Temperature	238 to 272	°C
Suggested Shot Size	40 to 70	%
Middle Temperature	235 to 265	°C
Rear Temperature	230 to 260	°C
Back Pressure	0.345 to 1.03	MPa
Mold Temperature	40 to 100	°C