

Technical Data Sheet

Diamond ASA 2020 LG50 NAT



Acrylonitrile Styrene Acrylate

Product Description

Diamond ASA 2020 LG50 NAT is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Weather Resistance, and Medium Impact Resistance.

Processing Method	Injection Molding
Attribute	Good Weather Resistance; Medium Impact Resistance
Forms	Pellets

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (220 °C/10.0 kg, Procedure A)	20	g/10 min	ASTM D1238
Density - Specific Gravity	1.06	g/cm ³	ASTM D792
Mechanical			
Tensile Elongation at Yield	2.8	%	ASTM D638
Tensile Strength at Yield, (51 mm/min)	44.8	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Tangent)	2140	MPa	ASTM D790
Tensile Elongation at Break	23	%	ASTM D638
Flexural Strength	64.8	MPa	ASTM D790
Impact			
Notched Izod Impact, (23 °C, 3.18 mm)	110	J/m	ASTM D256

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	80 to 85	°C
Suggested Max Moisture	0.1	%
Nozzle Temperature	220 to 272	°C
Processing (Melt) Temp	220 to 272	°C
Front Temperature	235 to 272	°C
Suggested Shot Size	40 to 70	%
Middle Temperature	232 to 265	°C
Rear Temperature	230 to 260	°C
Injection Rate	Fast	
Back Pressure	0.517 to 1.03	MPa
Mold Temperature	40 to 80	°C