

Technical Data Sheet

Diamond ASA S225LG 1002 UVNAT

Acrylonitrile Styrene Acrylate

Product Description

Diamond ASA S225LG 1002 UVNAT is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Weather Resistance, and Low Fogging.

Processing Method	Injection Molding
Attribute	Good Weather Resistance; Low Fogging
Forms	Pellets

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (220 °C/10.0 kg)	11	g/10 min	ASTM D1238
Density - Specific Gravity	1.07	g/cm ³	ASTM D792
Mechanical			
Tensile Elongation at Yield, (51 mm/min, 23 °C, 3.18 mm, Injection Molded, Type I)	3.2	%	ASTM D638
Tensile Strength at Yield, (51 mm/min, 23 °C, 3.18 mm, Injection Molded, Type I)	42.7	MPa	ASTM D638
Tensile Strength at Break, (51 mm/min, 23 °C, 3.18 mm, Injection Molded, Type I)	37.9	MPa	ASTM D638
Tensile Elongation at Break, (51 mm/min, 23 °C, 3.18 mm, Injection Molded, Type I)	42	%	ASTM D638
Impact			
Notched Izod Impact, (23 °C, 3.18 mm, Injection Molded)	81	J/m	ASTM D256
Thermal			
Vicat Softening Temperature, (Loading 1 (10 N))	105	°C	ASTM D1525
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm, Injection Molded)	77.2	°C	ASTM D648

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	80 to 85	°C
Suggested Max Moisture	0.02	%
Nozzle Temperature	220 to 260	°C
Processing (Melt) Temp	220 to 260	°C
Front Temperature	235 to 260	°C
Suggested Shot Size	40 to 70	%
Middle Temperature	232 to 260	°C
Rear Temperature	230 to 260	°C
Injection Rate	Fast	
Back Pressure	0.517 to 1.03	MPa
Mold Temperature	71 to 82	°C