Technical Data Sheet

Centrex ASA 810 000000NAT

Acrylonitrile Styrene Acrylate

Product Description

Centrex ASA 810 000000NAT is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Processability, Good Weather Resistance, High Flow, High Gloss, and Medium Impact Resistance.

Processing Method	Injection Molding
Attribute	Good Processability; Good Weather Resistance; High Flow; High Gloss; Medium Impact Resistance
Forms	Pellets
Application	Outdoor Applications

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (220 °C/10.0 kg)	21	g/10 min	ASTM D1238
Density - Specific Gravity	1.06	g/cm³	ASTM D792
Mechanical			
Tensile Strength at Yield, (5.1 mm/min)	40.7	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Tangent)	2390	MPa	ASTM D790
Tensile Modulus, (5.1 mm/min)	2460	MPa	ASTM D638
Flexural Strength, (1.3 mm/min)	70.3	MPa	ASTM D790
Impact			
Instrumented Dart Impact			
(23 °C, Total Energy)	45.0	J	ASTM D3763
(-30 °C, Total Energy)	10.0	J	ASTM D3763
(0 °C, Total Energy)	40.0	J	ASTM D3763
Notched Izod Impact			
(23 °C, 3.18 mm)	85	J/m	ASTM D256
(-30 °C, 3.18 mm)	53	J/m	ASTM D256
(0 °C, 3.18 mm)	64	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	100		ASTM D785
Thermal			
Deflection Temperature Under Load Unannealed (264 psi)			
(3.18 mm)	74.0	°C	ASTM D648
(6.35 mm)	80.0	°C	ASTM D648

Injection Parameters	Nominal Value	Units
Drying Time, (Desiccant Dryer)	2.0	hr
Drying Temperature, (Desiccant Dryer)	82 to 88	°C
Dew Point, (Desiccant Dryer)	-29	°C
Suggested Max Moisture	0.1	%
Nozzle Temperature	238 to 271	°C
Processing (Melt) Temp	238 to 271	°C
Front Temperature	238 to 271	°C
Screw L/D Ratio	20.0-1.0	
Screw Compression Ratio	2.5-1.0	
Suggested Shot Size	50 to 70	%
Middle Temperature	238 to 271	°C
Rear Temperature	238 to 271	°C
Injection Rate	Moderate	
Mold Temperature	43 to 82	°C