

Technical Data Sheet

Diamond SAN 279BUE

Styrene Acrylonitrile

Product Description

Diamond SAN 279BUE is a Styrene Acrylonitrile material and is typically used in Injection Molding applications.

Processing Method Injection Molding

Appearance White

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(200 °C/5.0 kg, Procedure A)	2.0	g/10 min	ASTM D1238
(230 °C/3.8 kg, Procedure A)	7.5	g/10 min	ASTM D1238
Density - Specific Gravity	1.08	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	71.7	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Tangent)	3450	MPa	ASTM D790
Impact			
Notched Izod Impact, (23 °C, 3.18 mm)	21	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	123		ASTM D785
Thermal			
Vicat Softening Temperature, (Loading 1 (10 N))	101	°C	ASTM D1525
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm)	88.9	°C	ASTM D648
Optical			
Haze	1.9	%	ASTM D1003
Light Transmittance	89	%	ASTM D1003
UL Information			
Flame Rating, (1.5 mm)	HB		UL 94

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	71 to 82	°C
Clamp Tonnage	2.8 to 4.1	kN/cm ²
Nozzle Temperature	193 to 232	°C
Processing (Melt) Temp	193 to 216	°C
Front Temperature	193 to 232	°C
Suggested Shot Size	40 to 75	%
Middle Temperature	182 to 221	°C
Rear Temperature	160 to 182	°C
Injection Rate	Moderate-Fast	
Back Pressure	0.517 to 1.03	MPa
Mold Temperature	27 to 77	°C
Injection Pressure	0.414 to 7.58	MPa