

# Diamond SAN 279BUE

## LyondellBasell Industries - Styrene Acrylonitrile

### General Information

#### Product Description

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

#### General

Appearance	• White
Processing Method	• Injection Molding

### Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.08		ASTM D792
Melt Mass-Flow Rate (MFR) <sup>2</sup>			ASTM D1238
200°C/5.0 kg	2.0	g/10 min	
230°C/3.8 kg	7.5	g/10 min	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>3</sup> (Yield)	10400	psi	ASTM D638
Flexural Modulus - Tangent <sup>4</sup>	500000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	0.39	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	123		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.125 in	192	°F	
Vicat Softening Temperature	214	°F	ASTM D1525 <sup>5</sup>
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94
Optical	Nominal Value	Unit	Test Method
Light Transmittance	89.0	%	ASTM D1003
Haze	1.90	%	ASTM D1003

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	160 to 180	°F
Drying Time	2.0 to 4.0	hr
Suggested Shot Size	40 to 75	%
Rear Temperature	320 to 360	°F
Middle Temperature	360 to 430	°F
Front Temperature	379 to 450	°F
Nozzle Temperature	379 to 450	°F
Processing (Melt) Temp	379 to 421	°F
Mold Temperature	81 to 171	°F
Injection Pressure	60.0 to 1100	psi
Injection Rate	Moderate-Fast	
Back Pressure	75.0 to 149	psi
Injection	Nominal Value	Unit
Clamp Tonnage	2.0 to 3.0	tons/in <sup>2</sup>