

Diamond SAN 300 PELLETNAT

LyondellBasell Industries - Styrene Acrylonitrile

General Information

Product Description

Diamond SAN 300 PELLETNAT is a Styrene Acrylonitrile material and is typically used in Injection Molding applications.

General

Appearance	• Natural Color
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.07		ASTM D792
Melt Mass-Flow Rate (MFR) ²			ASTM D1238
200°C/5.0 kg	8.0	g/10 min	
230°C/3.8 kg	31	g/10 min	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (Yield)	8600	psi	ASTM D638
Flexural Modulus - Tangent ⁴	460000	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	206	°F	
Vicat Softening Temperature	212	°F	ASTM D1525 ⁵

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
Clamp Tonnage	2.0 to 3.0	tons/in ²