

Technical Data Sheet

# Network Polymers San 279

Styrene Acrylonitrile  
LyondellBasell Industries  
Engineering Plastics

General			
Agency Ratings	• FDA 21 CFR 181.32(a)(3)(ii)		
Appearance	• White		
Processing Method	• Injection Molding		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.08	1.08 g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) <sup>1</sup>			ASTM D1238
200°c/5.0 Kg	2.0 g/10 min	2.0 g/10 min	
230°c/3.8 Kg	7.5 g/10 min	7.5 g/10 min	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength <sup>2</sup> (Yield)	10400 psi	71.7 MPa	ASTM D638
Flexural Modulus - Tangent <sup>3</sup>	500000 psi	3450 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°f (23°c), 0.125 In (3.18 Mm)	0.40 ft·lb/in	21 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	123	123	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed, 0.125 In (3.18 Mm)	192 °F	88.9 °C	
Vicat Softening Temperature	214 °F	101 °C	ASTM D1525 <sup>4</sup>
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 In (1.5 Mm))	HB	HB	UL 94
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Light Transmittance	89.0 %	89.0 %	ASTM D1003
Haze	1.90 %	1.90 %	ASTM D1003

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	160 to 180 °F	71 to 82 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Shot Size	40 to 75 %	40 to 75 %
Rear Temperature	320 to 360 °F	160 to 182 °C
Middle Temperature	360 to 430 °F	182 to 221 °C
Front Temperature	380 to 450 °F	193 to 232 °C
Nozzle Temperature	380 to 450 °F	193 to 232 °C
Processing (Melt) Temp	380 to 420 °F	193 to 216 °C
Mold Temperature	80 to 170 °F	27 to 77 °C
Injection Pressure	60.0 to 1100 psi	0.414 to 7.58 MPa
Injection Rate	Moderate-Fast	Moderate-Fast
Back Pressure	75.0 to 150 psi	0.517 to 1.03 MPa
Clamp Tonnage	2.0 to 3.0 tons/in <sup>2</sup>	2.8 to 4.1 kN/cm <sup>2</sup>

**Notes**

- <sup>1</sup> Procedure A
- <sup>2</sup> 2.0 in/min (51 mm/min)
- <sup>3</sup> 0.050 in/min (1.3 mm/min)
- <sup>4</sup> Loading 1 (10 N)

**Notes**

These are typical property values not to be construed as specification limits.