

## Technical Data Sheet

**Polyman SAN 29/10 WHI 81590 MB**

Styrene Acrylonitrile

**Product Description**

Good flow SAN grade with high chemical resistance

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Good Chemical Resistance; Good Flow
<b>Resin ID</b>	SAN

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Volume Flow Rate, (230 °C/3.8 kg)	10	cm <sup>3</sup> /10 min	ISO 1133
Density, (Method A)	1.08	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
Tensile Strain at Break, (Type 1A, 5 mm/min)	3.0	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	70.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	3700	MPa	ISO 527-1
<b>Impact</b>			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	3.0	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	17	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			
Ball Indentation Hardness, (H 358/30)	171	MPa	ISO 2039-1
<b>Thermal</b>			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	102	°C	ISO 306
(A (10N), 50 °C/h)	106	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	103	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	100	°C	ISO 75-2/A

Injection Parameters	Nominal Value	Units
Nozzle Temperature	240 to 260	°C
Screw Speed	<600	mm/sec
Processing (Melt) Temp	220 to 250	°C
Front Temperature	240 to 250	°C
Holding Pressure	30.0 to 90.0	MPa
Middle Temperature	210 to 230	°C
Rear Temperature	180 to 200	°C
Injection Rate	Moderate-Fast	
Back Pressure	5.00 to 15.0	MPa
Mold Temperature	50 to 80	°C
Injection Pressure	100 to 150	MPa