

Technical Data Sheet

Schuladur A NV12 SHI NAT

Polybutylene Terephthalate

Product Description

Low viscosity non-reinforced PBT compound providing high impact strength

Processing Method	Injection Molding
Attribute	Good Flow; Impact Modified
Resin ID	PBT

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (250 °C/2.16 kg)	25	cm ³ /10 min	ISO 1133
Density, (Method A)	1.25	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	47.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	5.0	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2000	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	15	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	No Break		ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	160	°C	ISO 306
(A (10N), 50 °C/h)	216	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	138	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	52.0	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	600	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			

Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm)	650	°C	IEC 60695-2-12
(3.0 mm)	650	°C	IEC 60695-2-12
Additional Information			
Water Absorption 23C/50RH	0.4	%	ISO 62
UL Information			
Flammability Classification			
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	100	°C
Suggested Max Moisture	0.05	%
Processing (Melt) Temp	240 to 250	°C
Mold Temperature	70 to 90	°C