Technical Data Sheet

Schulamid 6 MV HI K1893 NAT

Polyamide 6

Product Description
super high impact modified polyamide 6 compound

Processing Method	Extrusion; Injection Molding
Resin ID	PA6-I

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.04	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield			
(Type 1A, 50 mm/min)	35.0	MPa	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	22.0	MPa	ISO 527-2
Tensile Strain at Yield			
(Type 1A, 50 mm/min)	5.5	%	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	35	%	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	1400	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	400	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	100	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	30	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	No Break		ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	No Break		ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	108	°C	ISO 306
(A (10N), 120 °C/h)	210	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	70.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	40.0	°C	ISO 75-2/A
Flammable			

Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302

Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 4.0	hr
Drying Temperature	80	°C
Suggested Max Moisture	0.040 to 0.10	%
Processing (Melt) Temp	250 to 270	°C
Mold Temperature	60 to 90	°C