Technical Data Sheet

Schulaketon NV NOM BUM 49930

Polyketone, Aliphatic

Product Description

Low viscosity aliphatic Polyketon

Processing Method	Injection Molding
Resin ID	PK

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (240 °C/2.16 kg)	60	cm³/10 min	ISO 1133
Density, (Method A)	1.24	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	65.0	MPa	ISO 527-2
Flexural Modulus, (2.0 mm/min)	1700	MPa	ISO 178
Tensile Strain at Yield, (Type 1A, 50 mm/min)	18	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	1650	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 3.5%)	40.0	MPa	ISO 178
(2.0 mm/min, 9.0%)	55.0	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	11	kJ/m²	ISO 179
(-40 °C, Type 1, Edgewise, Notch A)	3.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-40 °C)	No Break		ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	186	°C	ISO 306
(A (10N), 50 °C/h)	200	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	184	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	89.0	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI), (Solution A)	600	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093

Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	700	°C	IEC 60695-2-12
(3.0 mm)	700	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	725	°C	IEC 60695-2-13
(3.0 mm)	725	°C	IEC 60695-2-13
UL Information			
Flame Rating			
(1.6 mm)	HB		UL 94
(3.2 mm)	HB		UL 94
Flammability Classification			
(1.6 mm)	HB		IEC 60695-11-10, -20
(3.2 mm)	HB		IEC 60695-11-10, -20

Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 4.0	hr
Drying Temperature	80	°C
Suggested Max Moisture	0.15	%
Processing (Melt) Temp	225 to 240	°C
Mold Temperature	60 to 120	°C