Technical Data Sheet

Schulablend M/MX 5301 U NAT

Polycarbonate + PBT

Product Description

PC-PBT blend with improved UV-resistance. (Former name: SCHULABLEND M/MX 50 UV)

Processing Method	Extrusion; Injection Molding
Forms	Pellets
Resin ID	PC+PBT

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (260 °C/5.0 kg)	54	cm³/10 min	ISO 1133
Density, (Method A)	1.21	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	52.0	MPa	ISO 527-2
Nominal Tensile Strain at Break, (50 mm/min, Type 1A)	11	%	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	4.5	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 50 mm/min)	35.0	MPa	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)	45	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	14	kJ/m²	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)	107	°C	ISO 306
(A (10N), 50 °C/h)	142	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	85.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	66.0	°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	120	°C
Suggested Max Moisture	0.02	%
Processing (Melt) Temp	250 to 260	°C
Mold Temperature	70 to 100	°C