Technical Data Sheet

Polyman PC XP 31 R EF BLK 71895

Polycarbonate

Product Description
Increased impact resistant PC standard gradeRN: food contact grade - RS: UV-stabilized

Processing Method	Injection Molding
Attribute	Good Impact Resistance

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (300 °C/1.2 kg)	9.0	cm³/10 min	ISO 1133
Density, (Method A)	1.20	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	61.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	7.0	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2300	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	79	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	No Break		ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	110	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (B (50N), 50 °C/h)	147	°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)	127	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	275	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, (2.0 mm)	850	°C	IEC 60695-2-12
Additional Information			
Water Absorption 23C/50RH	0.34	%	ISO 62

UL Information		
Flammability Classification		
(1.5 mm)	HB	IEC 60695-11-10, -20
(3.0 mm)	HB	IEC 60695-11-10, -20
UL File Number	E86615	

Injection Parameters	Nominal Value	Units
Drying Time	4.0 to 12	hr
Drying Temperature	120	°C
Processing (Melt) Temp	280 to 310	°C
Mold Temperature	85 to 115	°C