

Technical Data Sheet

Polyman (PC) XP 21 RS NAT 30003



Polycarbonate

Product Description

Good flow PC standard grade,RN: food contact grade - RS: UV-stabilized

Processing Method Injection Molding

Resin ID PC

| Typical Properties | Nominal Value | Units | Test Method |
|---|---------------|-------------------------|----------------|
| Physical | | | |
| Melt Volume Flow Rate, (300 °C/1.2 kg) | 14 | cm ³ /10 min | ISO 1133 |
| Density, (Method A) | 1.20 | g/cm ³ | 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) | 6.0 | % | 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) | 70 | kJ/m ² | ISO 179 |
| (-30 °C, Type 1, Edgewise, Notch A) | 34 | kJ/m ² | 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) | 150 | °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) | 126 | °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 |
| UL Information | | | |

Flammability Classification

| | | |
|----------|-----|--------------------------|
| (1.5 mm) | V-2 | IEC 60695-11-10, - 20 |
| (3.0 mm) | V-2 | IEC 60695-11-10, - 20 |

| 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 |
