

Product Description

General-purpose grade with well-balanced properties intended for both injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Features	• General Purpose		
Uses	• General Purpose		
Agency Ratings	• EC 1907/2006 (REACH) • FDA Unspecified Rating	• ULC Unspecified Rating • USP Class VI	
RoHS Compliance	• RoHS Compliant		
Appearance	• Amber	• Clear/Transparent	• Natural Color
Forms	• Pellets		
Processing Method	• Extrusion • Injection Molding	• Profile Extrusion • Sheet Extrusion	• Thermoforming
Multi-Point Data	• Creep Modulus vs. Time (ISO 11403-1) • Isochronous Stress vs. Strain (ISO 11403-1)	• Isothermal Stress vs. Strain (ISO 11403-1) • Secant Modulus vs. Strain (ISO 11403-1)	• Specific Volume vs Temperature (ISO 11403-2) • Viscosity vs. Shear Rate (ISO 11403-2)

Physical	Nominal Value Unit	Test Method
Specific Gravity		
--	1.08 g/cm ³	ASTM D792 ISO 1183
--	1080 kg/m ³	ISO 1183 ²
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	10.0 cm ³ /10min	ISO 1133
Molding Shrinkage - Flow	0.50 %	ASTM D955

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
23°C	3800 MPa	ASTM D638
23°C	3700 MPa	ISO 527-2
--	3700 MPa	ISO 527-2 ²
Tensile Strength		
Yield, 23°C	75.0 MPa	ASTM D638
Break, 23°C	75.0 MPa	ISO 527-2
Break	75.0 MPa	ISO 527-2 ²
Nominal Tensile Strain at Break		
23°C	3.0 %	ISO 527-2
--	3.0 %	ISO 527-2 ²
Tensile Creep Modulus		ISO 899-1
1 hr	3500 MPa	
1000 hr	2800 MPa	
Flexural Strength (23°C)	125 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		
23°C	2.0 kJ/m ²	ISO 179
23°C	2.00 kJ/m ²	ISO 179/1eA ²
Charpy Unnotched Impact Strength		ISO 179
-30°C	18 kJ/m ²	
23°C	18 kJ/m ²	
Notched Izod Impact (23°C)	15.0 J/m	ASTM D256

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
0.45 MPa, Unannealed	102 °C	ISO 75-2/B
0.45 MPa, Annealed	102 °C	ASTM D648
0.45 MPa	102 °C	ISO 75-2 ²
1.8 MPa, Unannealed	98.0 °C	ISO 75-2/A
1.8 MPa, Annealed	98.0 °C	ASTM D648
1.8 MPa	98.0 °C	ISO 75-2 ²
Vicat Softening Temperature		
--	106 °C	ASTM D1525 ³ ISO 306 ³
50°C/h, B (50N)	106 °C	ISO 306 ²
CLTE - Flow	0.000070 cm/cm/°C	ISO 11359-2
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	> 1.0E+13 ohms	ASTM D257 IEC 60093
Volume Resistivity		
--	> 1.0E+13 ohm·cm	ASTM D257 IEC 60093
--	> 1.0E+11 ohm·m	IEC 60093 ²
Dielectric Constant		
1.00 mm, 1 MHz	2.70	ASTM D150
100 Hz	3.00	IEC 60250
1 MHz	2.70	IEC 60250
Dissipation Factor		IEC 60250
100 Hz	40	
1 MHz	70	
Comparative Tracking Index		
--	425 V	IEC 60112
--	425 V	IEC 60112 ²
Electric Strength (1.50 mm)	34 kV/mm	IEC 60243-1
Flammability	Nominal Value Unit	Test Method
Flame Rating - UL (1.50 mm)	HB	UL 94
UL 746	Nominal Value Unit	Test Method
RTI Str (1.50 mm)	50.0 °C	UL 746
RTI Imp (1.50 mm)	50.0 °C	UL 746
RTI Elec (1.50 mm)	50.0 °C	UL 746

Notes

- ¹ Typical properties: these are not to be construed as specifications.
² Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
³ Rate A (50°C/h), Loading 1 (10 N)