

Product Texts

Transparent, high flow Polyetherimide (Tg 217C). ECO Conforming. US FDA and EU Food Contact Compliant.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	25	cm ³ /10min	ISO 1133
Temperature	360	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	17.8	g/10min	ASTM D 1238
Temperature	337	°C	-
Load	6.6	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3200	MPa	ISO 527
Yield stress	105	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	85	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	3300	MPa	ISO 178
Charpy notched impact strength, +23°C	3	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	N	kJ/m ²	ISO 180/1U
Izod impact strength, -30°C, 4mm	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	5	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	5	kJ/m ²	ISO 180/1A
Ball indentation hardness	140	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	3590	MPa	ASTM D 638
Tensile Strength at Yield	110	MPa	ASTM D 638
Tensile Strength at Break	105	MPa	ASTM D 638
Elongation at Yield	7	%	ASTM D 638
Elongation at Break	60	%	ASTM D 638
Flexural Modulus	3550	MPa	ASTM D 790
Rockwell Hardness	M 109	-	ASTM D 785
Taber Abrasion Resistance	10	mg/1000 cycles	ASTM D 1044
Izod Impact notched, 1/8 in	32	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	35	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	1340	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	190	°C	ISO 75-1/-2
Vicat softening temperature, A	215	°C	ISO 306
Vicat softening temperature, B	211	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	212	°C	ISO 306
Thermal Conductivity	0.21	W/(m K)	DIN 52616
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (3)	3.2	mm	-
ASTM Data			
DTUL @ 66 psi	205	°C	ASTM D 648
DTUL @ 264 psi	197	°C	ASTM D 648
Vicat Temperature	218	°C	ASTM D 1525
Thermal Conductivity, solid state	0.0317	W/(m K)	ASTM C 177

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	2.9	-	IEC 62631-2-1

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Dissipation factor, 1MHz	60	E-4	IEC 62631-2-1
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	33	kV/mm	IEC 60243-1
Comparative tracking index	150	-	IEC 60112

ASTM Data

Dielectric Strength, Short Time	27.9	kV/mm	ASTM D 149
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties

	Value	Unit	Test Standard
Water absorption	1.25	%	Sim. to ISO 62
Humidity absorption	0.7	%	Sim. to ISO 62
Density	1270	kg/m ³	ISO 1183
Density	1270	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding

	Value	Unit	Test Standard
Pre-drying - Temperature	150	°C	-
Pre-drying - Time	4 - 6	h	-
Processing humidity	≤0.02	%	-
Melt temperature	350 - 400	°C	-
Mold temperature	135 - 165	°C	-
Zone 1	330 - 400	°C	-
Zone 2	340 - 400	°C	-
Zone 3	345 - 400	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Certifications

Food contact, Food approval FDA 21 CFR

Special Characteristics

Transparent

Regional Availability

North America