

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	12	g/10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
Molding shrinkage, parallel	0	%	ISO 294-4, 2577
Molding shrinkage, normal	0	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	12	g/10min	ASTM D 1238
Temperature	260	°C	-
Load	5	kg	-
Mold Shrinkage, MD	0.0015	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.0015	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	13500	MPa	ISO 527
Stress at break	78	MPa	ISO 527
Strain at break	1.5	%	ISO 527
Flexural modulus, 23°C	12500	MPa	ISO 178
Flexural strength	210	MPa	ISO 178
Charpy notched impact strength, +23°C	12 ^[1]	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	11 ^[1]	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	11 ^[1]	kJ/m ²	ISO 180/1A
Izod notched impact strength	11 ^[1]	kJ/m ²	ISO 180/1A
Temperature	-40	°C	-
Rockwell hardness	R 120	-	ISO 2039-2
ASTM Data			
Tensile Modulus	10790	MPa	ASTM D 638
Tensile Strength at Break	133	MPa	ASTM D 638
Elongation at Break	1.6	%	ASTM D 638
Flexural Modulus	12390	MPa	ASTM D 790
Flexural Strength	216	MPa	ASTM D 790
Rockwell Hardness	R 120	-	ASTM D 785
Izod Impact notched, 1/8 in	108	J/m	ASTM D 256
Izod Impact notched, 1/4 in	88.3	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	98.1	J/m	ASTM D 256
Temperature	-30	°C	-

1: 4 mm

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	96 ^[2]	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	106 ^[2]	°C	ISO 75-1/-2
Vicat softening temperature, B	105	°C	ISO 306
Coeff. of linear therm. expansion, parallel	18	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	54	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	3.0	mm	-
ASTM Data			
UL 94 Flame rating	V-0	-	UL 94
Thickness tested	0.8	mm	-
Coefficient of Thermal Expansion, MD	18	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	54	E-6/K	ASTM D 696
DTUL @ 66 psi	103 ^[3]	°C	ASTM D 648
DTUL @ 264 psi	95 ^[3]	°C	ASTM D 648
Vicat Temperature	105	°C	ASTM D 1525

2: 4 mm 3: 6.4 mm

Electrical properties	Value	Unit	Test Standard
ISO Data			
Volume resistivity	1E15	Ohm*m	IEC 62631-3-1
Surface resistivity	1E15	Ohm	IEC 62631-3-2
ASTM Data			
Dielectric Strength, Short Time	21	kV/mm	ASTM D 149
Surface Resistivity	1E15	Ohm	ASTM D 257
Volume Resistivity	1E17	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1530	kg/m ³	ISO 1183
Density	1530	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	85 - 90	°C	-
Pre-drying - Time	3 - 5	h	-
Processing humidity	≤0.04	%	-
Melt temperature	270 - 320	°C	-
Mold temperature	60 - 100	°C	-
Zone 1	270 - 290	°C	-
Zone 2	280 - 310	°C	-
Zone 3	290 - 320	°C	-
Nozzle temperature	290 - 320	°C	-

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant, Halogen-free

Features

Low Warpage

Applications

Electrical and Electronical, General Purpose

Regional Availability

North America, Europe, Asia Pacific, South and Central America