

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	19	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Melt flow index, MFI	20	g/10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Molding shrinkage, parallel	0.7	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2400	MPa	ISO 527
Yield stress	65	MPa	ISO 527
Yield strain	6	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Stress at break	65	MPa	ISO 527
Strain at break	120	%	ISO 527
Flexural modulus, 23°C	2400	MPa	ISO 178
Flexural strength	96	MPa	ISO 178
Tensile creep modulus, 1h	2200	MPa	ISO 899-1
Tensile creep modulus, 1000h	1900	MPa	ISO 899-1
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	65	kJ/m ²	ISO 179/1eA
Type of failure	P(C)	-	-
Charpy notched impact strength, -30°C	12	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-
Izod notched impact strength, +23°C	50	kJ/m ²	ISO 180/1A
Izod notched impact strength	11	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
Puncture - maximum force, +23°C	5000	N	ISO 6603-2
Puncture - maximum force, -30°C	5900	N	ISO 6603-2
Puncture energy, +23°C	50	J	ISO 6603-2
Puncture energy, -30°C	55	J	ISO 6603-2
Ball indentation hardness	115	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Glass transition temperature, 10°C/min	144	°C	ISO 11357-1/-2
Temp. of deflection under load, 1.80 MPa	124	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	137	°C	ISO 75-1/-2
Vicat softening temperature, B	145	°C	ISO 306
Coeff. of linear therm. expansion, parallel	65	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	65	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thckn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
Oxygen index	36	%	ISO 4589-1/-2
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (1)	0.75	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (2)	1.5	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (3)	3	mm	-
Glow Wire Ignition Temperature (GWIT)	875	°C	IEC 60695-2-13
GWIT - thickness tested (1)	0.75	mm	-
Glow Wire Ignition Temperature (GWIT)	900	°C	IEC 60695-2-13
GWIT - thickness tested (2)	1.5	mm	-

Glow Wire Ignition Temperature (GWIT)	900	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
Other Standards^[5]			
Thermal Conductivity, solid state	0.2	W/(m K)	ISO 8302

S: These properties are reported by the producer according standards that are different to our defaults.

Electrical properties	Value	Unit	Test Standard
ISO Data			
Electric strength	34	kV/mm	IEC 60243-1
Comparative tracking index	225	-	IEC 60112
Other Standards^[5]			
Relative permittivity, 100Hz	3.1	-	IEC 60250
Relative permittivity, 1MHz	3	-	IEC 60250
Dissipation factor, 100Hz	8	E-4	IEC 60250
Dissipation factor, 1MHz	90	E-4	IEC 60250
Volume resistivity	1E14	Ohm*m	IEC 60093
Surface resistivity	1E16	Ohm	IEC 60093

S: These properties are reported by the producer according standards that are different to our defaults.

Other properties	Value	Unit	Test Standard
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.12	%	Sim. to ISO 62
Density	1200	kg/m ³	ISO 1183
Bulk density	640	kg/m ³	-

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	2 - 3	h	-
Processing humidity	≤0.02	%	-
Melt temperature	280 - 320	°C	-
Mold temperature	80 - 120	°C	-
Zone 1	250 - 260	°C	-
Zone 2	270 - 280	°C	-
Zone 3	280 - 290	°C	-
Nozzle temperature	290 - 300	°C	-
Back pressure	5 - 15	MPa	-

Characteristics

Processing

Injection Molding

Additives

Release agent

Special Characteristics

Flame retardant, Opaque

Certifications

Contains renewable resources, ISCC Plus

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa