

Product Texts

Partially bio-circular grade / Attributed via mass balance (according to ISCC PLUS Standard).

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	6.1	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Stress at break	70	MPa	ISO 527
Strain at break	130	%	ISO 527
Flexural modulus, 23°C	2350	MPa	ISO 178
Flexural strength	97	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, 3mm	65	kJ/m ²	ISO 179/1eA
Type of failure	P	-	-
Charpy notched impact strength, -30°C, 3mm	14	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-
Izod notched impact strength, +23°C	65	kJ/m ²	ISO 180/1A
Izod notched impact strength	15	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
Puncture - maximum force, +23°C	5100	N	ISO 6603-2
Puncture - maximum force, -30°C	6000	N	ISO 6603-2
Puncture energy, +23°C	55	J	ISO 6603-2
Puncture energy, -30°C	65	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	146	°C	ISO 11357-1/-2
Temp. of deflection under load, 1.80 MPa	125	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	139	°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
Oxygen index	28	%	ISO 4589-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.1	-	IEC 62631-2-1
Relative permittivity, 1MHz	3	-	IEC 62631-2-1
Dissipation factor, 100Hz	5	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	90	E-4	IEC 62631-2-1
Volume resistivity	1E14	Ohm*m	IEC 62631-3-1
Surface resistivity	1E16	Ohm	IEC 62631-3-2
Electric strength	34	kV/mm	IEC 60243-1

Comparative tracking index	250	-	IEC 60112
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Optical properties	Value	Unit	Test Standard
ISO Data			
Haze	0.8	-	ISO 14782
Luminous transmittance	89	%	ISO 13468-1, -2

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	660	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

Delivery form

Pellets

Additives

Release agent

Special Characteristics

Transparent, Opaque, Sterilizable, Ethylene Oxide (EtO)
Sterilization, Steam sterilization

Certifications

Contains renewable resources, Medical Grade, Biocompatibility
ISO 10993, ISCC Plus

Applications

Medical

Regional Availability

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