

Product Texts

- (PC PBT)-blend, impact modified, easy release, UV-stabilized, injection molding grade. Makroblend® UT6007 offers an exceptional low-temperature impact strength, good flowability and excellent chemical resistance.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	18	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2200	MPa	ISO 527
^[C] Yield stress	60	MPa	ISO 527
^[C] Yield strain	5	%	ISO 527
^[C] Nominal strain at break	>50	%	ISO 527
^[C] Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	60	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	40	kJ/m ²	ISO 179/1eA
^[C] Puncture - maximum force, +23°C	3800	N	ISO 6603-2
^[C] Puncture - maximum force, -30°C	5000	N	ISO 6603-2
^[C] Puncture energy, +23°C	47	J	ISO 6603-2
^[C] Puncture energy, -30°C	58	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	85	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	110	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	90	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	90	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.6	mm	-
^[C] Oxygen index	21	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3.2	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	7	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	45	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	>1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	30	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.5	%	Sim. to ISO 62
^[C] Humidity absorption	0.2	%	Sim. to ISO 62
^[C] Density	1200	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	270	°C	ISO 294
Injection Molding, mold temperature	70	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 105	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.01	%	-
Melt temperature	250 - 270	°C	-
Mold temperature	60 - 80	°C	-

Characteristics

Processing

Injection Molding

Special Characteristics

High impact or impact modified

Delivery form

Pellets

Chemical Resistance

General Chemical Resistance

Additives

Release agent

Regional Availability

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

Other text information

Injection molding

PREPROCESSING

Max. Water content: 0.01 %

Drying temperature: 100 - 105 °C

Drying time:

Circulating air drying oven (50 % fresh air) 4-12 h

Fresh air dryer (high speed dryer) 2-4 h

Dry air dryer 2-4 h

PROCESSING

Melt temperature: 250-270 °C

Mold temperature: 60-80 °C

Use open nozzle.