Makroblend® UT235 M RE

(PC+PET)-T15 — Covestro Deutschland AG

- (PC+PET)-blend, 15% mineral filled, easy flow, low coefficient of linear thermal expansion, easy release, injection molding. Molded parts from UT235M having exceptional dimensional stability.

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	4500	MPa	ISO 527
Stress at Break	67	MPa	ISO 527
Strain at Break	4	%	ISO 527
Impact Strength (Charpy), +23°C	85	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	85	kJ/m²	ISO 179/1eU
Puncture - maximum force, +23°C	4500	N	ISO 6603-2
Puncture energy, +23°C	36	J	ISO 6603-2
Flexural Modulus (23°C)	4650	MPa	ISO 178
Flexural strength	115	MPa	ISO 178
Impact Strength (Izod), 23°C	75	kJ/m²	ISO 180/1U

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	114	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	128	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	45	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	45	E-6/K	ISO 11359-1/-2

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.4	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1340	kg/m³	ISO 1183
Bulk density	750	kg/m³	-

Test specimen production	Value	Unit	Test Standard
ISO Data			
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

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	110	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.01	%	-
Melt temperature	260 - 280	°C	-
Mold temperature	70 - 80	°C	-
Zone 1	220 - 230	°C	-
Zone 2	240 - 250	°C	-
Zone 3	260 - 270	°C	-
Nozzle temperature	270 - 280	°C	-
Back pressure	5 - 10	MPa	-

Characteristics

Processing
Injection Molding

Certifications
Contains renewable resources, ISCC Plus

Additives
Release agent