Makroblend® UT305

(PC+PET) Covestro Deutschland AG

Product Texts

- (PC PET)-blend, easy release, injection molding. Makroblend UT305 offers high heat resistance, good chemical resistance and flowability. Molded parts from UT305 provide a good surface appearance and exceptional dimensional stability, even in high moisture environments.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**39**	cm³/10min	ISO 1133
Temperature	**270**	°C	-
Load	**5**	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2600**	MPa	ISO 527
[C] Yield stress	**69**	MPa	ISO 527
[C] Yield strain	**5.4**	%	ISO 527
[C] Nominal strain at break	**>50**	%	ISO 527
[C] Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**8**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**6**	kJ/m²	ISO 179/1eA
[C] Puncture - maximum force, +23°C	**4600**	N	ISO 6603-2
[C] Puncture - maximum force, -30°C	**5800**	N	ISO 6603-2
[C] Puncture energy, +23°C	**54**	J	ISO 6603-2
[C] Puncture energy, -30°C	**62**	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Temp. of deflection under load, 1.80 MPa	**109**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**128**	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**70**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**70**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Water absorption	**0.55**	%	Sim. to ISO 62
[C] Humidity absorption	**0.25**	%	Sim. to ISO 62
[C] Density	**1240**	kg/m³	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	**110**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Processing humidity	**≤0.01**	%	-
Melt temperature	**260 - 280**	°C	-
Mold temperature	**60 - 80**	°C	-

Characteristics

Processing
Injection Molding

Delivery form
Pellets

Additives
Release agent

Chemical Resistance
General Chemical Resistance

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: 110 °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: 260-280 °C
Mold temperature: 60-80 °C

Use open nozzle.