



**Makroblend® M5005 FR**

(PC+PBT)-I FR(40)

Covestro Deutschland AG

- (PC+PBT) blend
- unreinforced
- flame-retardant
- UV-stabilized
- impact modified
- injection molding grade. Good impact strength, dimensional stability and excellent chemical resistance. Manufactured according to GMP, Tested only according to ISO 10993-5 and ISO 10993-10 for contact with uncompromised skin only
- for questions regarding biocompatibility we ask for an email inquiry under [plastics@covestro.com](mailto:plastics@covestro.com).

Rheological properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	35	cm <sup>3</sup> /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-

Mechanical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2300	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	4	%	ISO 527
Impact Strength (Charpy), +23°C	no break	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	50	kJ/m <sup>2</sup>	ISO 179/1eA
Flexural Modulus (23°C)	2350	MPa	ISO 178
Flexural strength	85	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	45	kJ/m <sup>2</sup>	ISO 180/1A
Notched Impact Strength (Izod)	13	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-30	°C	-
Impact Strength (Izod), 23°C	no break	kJ/m <sup>2</sup>	ISO 180/1U

Thermal Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load (1.80 MPa)	77	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	89	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	90	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	90	E-6/K	ISO 11359-1/-2
Burning Behav. at thickness h	V-0	class	UL 94
Thickness tested	2.4	mm	-

Other Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Density	1250	kg/m <sup>3</sup>	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	≥4	h	-
Processing humidity	≤0.01	%	-
Melt temperature	260	°C	-
Mold temperature	70	°C	-

**Characteristics**

**Processing**

Injection Molding

**Chemical Resistance**

General Chemical Resistance

**Special Characteristics**

Flame retardant, Impact modified, UV stabilized

**Certifications**

Biocompatibility ISO 10993