

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.

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

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
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 ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	50	kJ/m ²	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 ²	ISO 180/1A
Notched Impact Strength (Izod)	13	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
Impact Strength (Izod), 23°C	no break	kJ/m ²	ISO 180/1U

Thermal Properties	Value	Unit	Test Standard
ISO Data			
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
ISO Data			
Density	1250	kg/m ³	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

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE**

ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.

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The buyer is solely responsible for confirming the suitability of the product for a particular application, its utilization and processing and must observe any applicable laws and government regulations. **NO EXPRESS OR IMPLIED RECOMMENDATION OR WARRANTY IS GIVEN WITH REGARD TO THE SUITABILITY OF THE PRODUCT FOR A PARTICULAR APPLICATION, SUCH AS, BUT NOT LIMITED TO, SAFETY-CRITICAL COMPONENTS OR SYSTEMS.**

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Important: irrespective of product type or designation, ALBIS does not recommend or support the use of any products it supplies which fall into the following medical, pharmaceutical or diagnostic application categories:

- risk class III applications according to EU directive 93/42/EEC
- any bodily implant application for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

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