

## Makroblend® EL703 (PC+PET)-I FR(16+42)

Covestro Deutschland AG

- (PC+PET) blend
- unreinforced
- flame-retardant
- UV-stabilized
- impact modified
- high flow
- injection molding grade. Good impact strength, dimensional stability and chemical resistance. Uses include outdoor electrical enclosures. UL746C f1 rated.

Rheological properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	26	cm <sup>3</sup> /10min	ISO 1133
Temperature	270	°C	-
Load	5	kg	-

Mechanical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2300	MPa	ISO 527
Yield stress	56	MPa	ISO 527
Yield strain	4.5	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Notched Impact Strength (Charpy), +23°C	50	kJ/m <sup>2</sup>	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	15	kJ/m <sup>2</sup>	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load (1.80 MPa)	96	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	119	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	70	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	80	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-0	class	UL 94
Burning Behav. at thickness h	V-0	class	UL 94
Thickness tested	3.0	mm	-
Burning Behav. 5V at Thickness h	5VA	class	IEC 60695-11-20
Thickness tested	3.0	mm	-

Electrical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Relative permittivity, 100Hz	3.5	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.3	-	IEC 62631-2-1
Dissipation Factor, 100Hz	30	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	200	E-4	IEC 62631-2-1
Volume Resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface Resistivity	>1E15	Ohm	IEC 62631-3-2
Electric Strength	34	kV/mm	IEC 60243-1
Comparative tracking index	200	-	IEC 60112

Other Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Water Absorption	0.5	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1300	kg/m <sup>3</sup>	ISO 1183

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
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	60 - 80	°C	-

## Characteristics

### Processing

Injection Molding

### Special Characteristics

Flame retardant, Impact modified, UV stabilized

### Delivery form

Pellets

### Features

Blending Resin

## 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.

## 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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