

Makrolon® FR6020

PC-I FR(40)

Covestro Deutschland AG

- polycarbonate
- medium viscosity
- easy release
- UV stabilized
- flame retardant
- non-reinforced
- good hydrolysis resistance
- impact modified
- Information technology
- electrical/electronic

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	9	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2380	MPa	ISO 527
Yield stress	58	MPa	ISO 527
Yield strain	6	%	ISO 527
Impact Strength (Charpy), +23°C	no break	kJ/m ²	ISO 179/1eU
Flexural Modulus (23°C)	2430	MPa	ISO 178
Flexural strength	90	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	67	kJ/m ²	ISO 180/1A
Notched Impact Strength (Izod)	26	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)	114	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	127	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	134	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	49	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	58	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	2.0	mm	-
Burning Behav. 5V at Thickness h	5VB	class	IEC 60695-11-20
Thickness tested	2.0	mm	-

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1200	kg/m ³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	300	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	280 - 300	°C	-
Mold temperature	80	°C	-

Characteristics

Processing

Injection Molding

Chemical Resistance

Hydrolysis

Special Characteristics

Flame retardant, Impact modified, UV stabilized

Applications

IT / Business Machine, Electrical and Electronical

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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