

Cycloloy* Resin MC5300

Asia Pacific: COMMERCIAL

Cycloloy MC5300 resin is a high heat, flame retardant PC/ABS blend. MC5300 resin passes UL-94 listing of 1.5mm V0 and 2.5mm 5VB. The balance of good flow, impact performance and heat resistance makes it suitable for various applications.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	62	MPa	SABIC - Japan Method
Tensile Strain, break	160 - 160	%	SABIC - Japan Method
Flexural Stress	93	MPa	ASTM D 790
Flexural Modulus	2400	MPa	ASTM D 790
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	794	J/m	ASTM D 256
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 6.4 mm, unannealed	120	°C	ASTM D 648
CTE, -30°C to 30°C	6.E-05 - 8.E-05	1/°C	TMA
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.19	-	ASTM D 792
Water Absorption, 24 hours	0.2	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.4 - 0.6	%	SABIC Method
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94
UL Recognized, 94-5VB Rating (3)	2.5	mm	UL 94

Source GMD, last updated:03/20/2007

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	100	°C
Drying Time	2	hrs
Melt Temperature	250 - 260	°C
Nozzle Temperature	250 - 260	°C
Front - Zone 3 Temperature	250 - 260	°C
Middle - Zone 2 Temperature	240 - 250	°C
Rear - Zone 1 Temperature	230 - 240	°C
Back Pressure	4.9 - 9.8	MPa
Screw Speed	50 - 100	rpm

Source GMD, last updated:03/20/2007

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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