

Cycolac* Resin MG37EPX

Americas: COMMERCIAL

ABS plating grade optimized for a broad processing window for both painted and plated applications.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield, 5 mm/min	48	MPa	ISO 527
Tensile Stress, break, 5 mm/min	39	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2	%	ISO 527
Tensile Strain, break, 5 mm/min	15.8	%	ISO 527
Tensile Modulus, 1 mm/min	2760	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	73	MPa	ISO 178
Flexural Modulus, 2 mm/min	2470	MPa	ISO 178
IMPACT	Value	Unit	Standard
Instrumented Impact Total Energy, 23°C	37	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	23	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	6	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
CTE, -40°C to 40°C, flow	6.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	98	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	81	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Mold Shrinkage, flow, 3.2 mm (5)	0.4 - 0.6	%	SABIC Method
Density	1.05	g/cm ³	ISO 1183

Source GMD, last updated:2010/04/06

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	80 - 95	°C
Drying Time	2 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	255 - 280	°C
Nozzle Temperature	255 - 280	°C
Front - Zone 3 Temperature	250 - 270	°C
Middle - Zone 2 Temperature	230 - 245	°C
Rear - Zone 1 Temperature	215 - 230	°C
Mold Temperature	40 - 80	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	30 - 60	rpm
Shot to Cylinder Size	50 - 70	%
Vent Depth	0.038 - 0.051	mm

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.

(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

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