

SABIC Innovative Plastics Cycloy® CY100FC PC+ABS (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , ABS Polymer , Polycarbonate/ABS Alloy, Unreinforced , Polycarbonate (PC)

Material Notes:

High impact PC+ABS material designed for local Pacific Automotive applications This data was supplied by SABIC-IP for the Europe-Africa-Middle East region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Cycloy-CY100FC-PCABS-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.13 g/cc	1.13 g/cc	ASTM D 792
Density	1.13 g/cc	0.0408 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.080 %	0.080 %	23°C / 50% RH; ISO 62
Water Absorption at Saturation	0.30 % @Temperature 23.0 °C	0.30 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage, Flow	0.0050 - 0.0090 cm/cm @Thickness 3.20 mm	0.0050 - 0.0090 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	10 g/10 min @Load 5.00 kg, Temperature 260 °C	10 g/10 min @Load 11.0 lb, Temperature 500 °F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	11 g/10 min @Load 5.00 kg, Temperature 260 °C	11 g/10 min @Load 11.0 lb, Temperature 500 °F	ASTM D 1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	53.0 MPa	7690 psi	Type I, 50 mm/min; ASTM D 638
	53.0 MPa	7690 psi	50 mm/min; ISO 527
Tensile Strength, Yield	53.0 MPa	7690 psi	Type I, 50 mm/min; ASTM D 638
	53.0 MPa	7690 psi	50 mm/min; ISO 527
Elongation at Break	100 %	100 %	Type I, 50 mm/min; ASTM D 638
	100 %	100 %	50 mm/min; ISO 527
Elongation at Yield	5.0 %	5.0 %	Type I, 50 mm/min; ASTM D 638
	5.0 %	5.0 %	50 mm/min; ISO 527

Mechanical Properties	Metric Pa	English	Comments ISO 527
	2.15 GPa	312 ksi	5 mm/min; ASTM D 638
Flexural Yield Strength	76.0 MPa	11000 psi	2 mm/min; ISO 178
	78.0 MPa	11300 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	2.05 GPa	297 ksi	2 mm/min; ISO 178
	2.10 GPa	305 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	4.50 J/cm	8.43 ft-lb/in	ASTM D 256
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	5.20 J/cm	9.74 ft-lb/in	ASTM D 256
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Notched (ISO)	40.0 kJ/m ²	19.0 ft-lb/in ²	80*10*3; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	50.0 kJ/m ²	23.8 ft-lb/in ²	80*10*3; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	4.00 J/cm ²	19.0 ft-lb/in ²	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	5.50 J/cm ²	26.2 ft-lb/in ²	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Impact Test	60.0 J	44.3 ft-lb	Instrumented Impact Total Energy; ASTM D 3763
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	80.0 µm/m-°C	44.4 µin/in-°F	ASTM E 831
	@Temperature -40.0 - 40.0 °C	@Temperature -40.0 - 104 °F	
	80.0 µm/m-°C	44.4 µin/in-°F	ISO 11359-2
	@Temperature -40.0 - 40.0 °C	@Temperature -40.0 - 104 °F	
CTE, linear, Transverse to Flow	80.0 µm/m-°C	44.4 µin/in-°F	ASTM E 831
	@Temperature -40.0 - 40.0 °C	@Temperature -40.0 - 104 °F	
	80.0 µm/m-°C	44.4 µin/in-°F	

Thermal Properties	Metric @ Temperature -40.0 - 40.0 °C	English @ Temperature -40.0 - 104 °F	Comments ²
Deflection Temperature at 1.8 MPa (264 psi)	105 °C	221 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	102 °C @Thickness 3.20 mm	216 °F @Thickness 0.126 in	unannealed; ASTM D 648
Vicat Softening Point	127 °C	261 °F	Rate B/50; ASTM D 1525
	127 °C	261 °F	Rate B/50; ISO 306
	128 °C	262 °F	Rate B/120; ISO 306

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China