

SABIC Innovative Plastics Cycloy® CY5105 PC+ABS (Europe-Africa-Middle East)

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

Material Notes:

Flame retardant PC/ABS blend using non-brominated and non-chlorinated flame retardant systems, offering excellent flow / impact balance for large size 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-CY5105-PCABS-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Density	1.18 g/cc	0.0426 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.20 %	0.20 %	23°C / 50% RH; ISO 62
Water Absorption at Saturation	0.60 %	0.60 %	ISO 62
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Melt Flow	23 g/10 min	23 g/10 min	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	@Load 2.16 kg, Temperature 260 °C	@Load 4.76 lb, Temperature 500 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	46.0 MPa	6670 psi	50 mm/min; ISO 527
	47.0 MPa	6820 psi	Type I, 50 mm/min; ASTM D 638
Tensile Strength, Yield	62.0 MPa	8990 psi	Type I, 50 mm/min; ASTM D 638
	62.0 MPa	8990 psi	50 mm/min; ISO 527
Elongation at Break	35 %	35 %	50 mm/min; ISO 527
	55 %	55 %	Type I, 50 mm/min; ASTM D 638
Elongation at Yield	4.0 %	4.0 %	50 mm/min; ISO 527
	4.1 %	4.1 %	Type I, 50 mm/min; ASTM D 638
Tensile Modulus	2.75 GPa	399 ksi	5 mm/min; ASTM D 638
	2.75 GPa	399 ksi	1 mm/min; ISO 527
Flexural Yield Strength	94.0 MPa	13600 psi	2 mm/min; ISO 178
Flexural Modulus	2.45 GPa	355 ksi	2 mm/min; ISO 178
	0.750 J/cm	1.41 ft-lb/in	

Izod Impact, Notched Mechanical Properties	Metric @ Temperature -30.0 °C	English @ Temperature -22.0 °F	ASTM D 256 Comments
	3.50 J/cm @Temperature 23.0 °C	6.56 ft-lb/in @Temperature 73.4 °F	ASTM D 256
Izod Impact, Notched (ISO)	6.00 kJ/m ² @Temperature -30.0 °C	2.86 ft-lb/in ² @Temperature -22.0 °F	80*10*4; ISO 180/1A
	8.00 kJ/m ² @Temperature -30.0 °C	3.81 ft-lb/in ² @Temperature -22.0 °F	80*10*3; ISO 180/1A
	20.0 kJ/m ² @Temperature 23.0 °C	9.52 ft-lb/in ² @Temperature 73.4 °F	80*10*4; ISO 180/1A
	30.0 kJ/m ² @Temperature 23.0 °C	14.3 ft-lb/in ² @Temperature 73.4 °F	80*10*3; ISO 180/1A
Charpy Impact, Notched	0.700 J/cm ² @Temperature -30.0 °C	3.33 ft-lb/in ² @Temperature -22.0 °F	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA
	2.20 J/cm ² @Temperature 23.0 °C	10.5 ft-lb/in ² @Temperature 73.4 °F	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
	3.00 J/cm ² @Temperature 23.0 °C	14.3 ft-lb/in ² @Temperature 73.4 °F	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	80.0 µm/m-°C @Temperature -40.0 - 40.0 °C	44.4 µin/in-°F @Temperature -40.0 - 104 °F	ISO 11359-2
CTE, linear, Transverse to Flow	80.0 µm/m-°C @Temperature -40.0 - 40.0 °C	44.4 µin/in-°F @Temperature -40.0 - 104 °F	ISO 11359-2
Deflection Temperature at 1.8 MPa (264 psi)	87.0 °C	189 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
Vicat Softening Point	104 °C	219 °F	Rate B/50; ISO 306
	105 °C	221 °F	Rate B/120; ISO 306
Flammability, UL94	V-1 @Thickness 1.50 mm	V-1 @Thickness 0.0591 in	UL 94
	V-0	V-0	UL 94

Thermal Properties	@Thickness 2.00 mm Metric	@Thickness 0.0787 in English	Comments
Oxygen Index	31 %	31 %	LOI; ISO 4589

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	IEC 60093
Surface Resistance	1.00e+15 ohm	1.00e+15 ohm	ROA; IEC 60093
Dielectric Constant	2.9	2.9	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
Dissipation Factor	0.0070	0.0070	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	250 - 400 V	250 - 400 V	PLC code 2; UL 746A

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