

CYCOLOY* C1000 Resin

Acrylonitrile Butadiene Styrene + PC

SABIC Innovative Plastics Europe

Product Description

CYCOLOY C1000 is a PC+ABS blend developed with emphasis on excellent processing efficiency while maintaining good heat resistance and impact ductility. It is an excellent material choice for a wide variety of automotive, appliance and electrical applications in designs that require optimal flow and an excellent balance of properties.

General

Material Status	• Commercial: Active
Availability	• Europe
Features	• Good Impact Resistance • Medium Heat Resistance
Uses	• Appliances • Automotive Applications • Electrical/Electronic Applications
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value	Unit	Test Method
Density	1.12	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	15.0	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow	0.50 to 0.70	%	ASTM D955
Water Absorption			ISO 62
Saturation, 23°C	0.70	%	
Equilibrium, 23°C, 50% RH	0.20	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2500	MPa	ISO 527-2/1
Tensile Stress			
Yield	50.0	MPa	ISO 527-2/5
Yield	55.0	MPa	ISO 527-2/50
Break	40.0	MPa	ISO 527-2/5 ISO 527-2/50
Tensile Strain			
Yield	4.0	%	ISO 527-2/5 ISO 527-2/50
Break	40	%	ISO 527-2/5
Break	> 50	%	ISO 527-2/50
Flexural Modulus ²	2300	MPa	ISO 178
Flexural Strength ^{2, 3}	85.0	MPa	ISO 178
Taber Abrasion Resistance			ASTM D1044
1000 Cycles, 1000 g, CS-17 Wheel	62.0	mg	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁴			ISO 179/1eA
-30°C	15	kJ/m ²	
23°C	45	kJ/m ²	
Notched Izod Impact Strength ⁵			ISO 180/1A
-30°C	15.0	kJ/m ²	
23°C	45.0	kJ/m ²	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	117		ISO 2039-2
Ball Indentation Hardness (H 358/30)	106	MPa	ISO 2039-1

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如需要更多物性资料请查阅 www.kedisujiao.com

备注：以上原料物性数据由厂家发布,我公司仅提供参考！数据如有变动，请联系原料生产厂家获知。我公司不承担任何法律责任！

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Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature ⁶			
0.45 MPa, Unannealed, 100 mm Span	115	°C	ISO 75-2/Be
1.8 MPa, Unannealed, 100 mm Span	92.0	°C	ISO 75-2/Ae
Vicat Softening Temperature			
--	113	°C	ISO 306/B50
--	115	°C	ISO 306/B120
Ball Pressure Test			IEC 60695-10-2
75°C	Pass		
100°C ⁷	Pass		
CLTE			ISO 11359-2
Flow: -40 to 40°C	0.000080	cm/cm/°C	
Transverse: -40 to 40°C	0.000080	cm/cm/°C	
Thermal Conductivity	0.20	W/m/K	ISO 8302
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohm·cm	IEC 60093
Relative Permittivity			IEC 60250
50 Hz	2.80		
60 Hz	2.80		
1 MHz	2.70		
Dissipation Factor			IEC 60250
50 Hz	0.0020		
60 Hz	0.0020		
1 MHz	0.0070		
Comparative Tracking Index	250	V	IEC 60112
Electric Strength			IEC 60243-1
0.800 mm, in Oil	35	kV/mm	
1.60 mm, in Oil	25	kV/mm	
3.20 mm, in Oil	17	kV/mm	
Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL			UL 94
1.50 mm	HB		
3.00 mm	HB		
Glow Wire Flammability Index (1.00 mm)	650	°C	IEC 60695-2-12
UL 746	Nominal Value	Unit	Test Method
RTI Str	60.0	°C	UL 746
RTI Imp	60.0	°C	UL 746
RTI Elec	60.0	°C	UL 746
Injection	Nominal Value	Unit	
Drying Temperature	90.0 to 100	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.020	%	
Hopper Temperature	60.0 to 80.0	°C	
Rear Temperature	210 to 240	°C	
Middle Temperature	230 to 270	°C	
Front Temperature	230 to 270	°C	
Nozzle Temperature	220 to 260	°C	
Processing (Melt) Temp	240 to 270	°C	
Mold Temperature	60.0 to 90.0	°C	

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Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 mm/min

³ Yield

⁴ 80*10*3 sp=62mm

⁵ 80*10*3

⁶ 120*10*4 mm

⁷ Approximate maximum

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