

CYCOLOY™ CY8630 resin

Polycarbonate + ABS

SABIC Innovative Plastics Asia Pacific

Message:

PC+ ABS Automotive applications

General Information			
Uses	Application in Automobile Field		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.12	g/cm ³	ASTM D792, ISO 1183
Molding Shrinkage			Internal method
Flow: 3.20mm	0.50 - 0.70	%	Internal method
Transverse flow: 3.20mm	0.50 - 0.70	%	Internal method
Water Absorption			ISO 62
23°C, 24 hr	0.30	%	ISO 62
Saturated, 23°C	0.60	%	ISO 62
Equilibrium, 23°C, 50% RH	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	2250	MPa	ASTM D638
--	2250	MPa	ISO 527-2/1
Tensile Strength			
Yield ²	58.0	MPa	ASTM D638
Yield	58.0	MPa	ISO 527-2/50
Fracture ³	50.0	MPa	ASTM D638
Fracture	55.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield ⁴	5.3	%	ASTM D638
Yield	5.2	%	ISO 527-2/50
Fracture ⁵	75	%	ASTM D638
Fracture	75	%	ISO 527-2/50
Flexural Modulus			
50.0mm span ⁶	2300	MPa	ASTM D790
-- ⁷	2300	MPa	ISO 178
Flexural Stress			
--	85.0	MPa	ISO 178
Yield, 50.0mm span ⁸	87.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁹			ISO 179/1eA

-30°C	25	kJ/m ²	ISO 179/1eA
23°C	50	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength ¹⁰			ISO 179/1eU
-30°C	No Break		ISO 179/1eU
23°C	No Break		ISO 179/1eU
Notched Izod Impact			
-30°C	300	J/m	ASTM D256
23°C	600	J/m	ASTM D256
-30°C ¹¹	25	kJ/m ²	ISO 180/1A
23°C ¹²	50	kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength ¹³			ISO 180/1U
-30°C	No Break		ISO 180/1U
23°C	No Break		ISO 180/1U
Instrumented Dart Impact			ASTM D3763
-30°C, Total Energy	90.0	J	ASTM D3763
23°C, Total Energy	90.0	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, unannealed, 3.20mm	128	°C	ASTM D648
1.8 MPa, unannealed, 3.20mm	110	°C	ASTM D648
Vicat Softening Temperature			
--	131	°C	ASTM D1525 ¹⁴
--	133	°C	ISO 306/B120
Ball Pressure Test			IEC 60695-10-2
75°C	Pass		IEC 60695-10-2
100°C ¹⁵	Pass		IEC 60695-10-2
Linear thermal expansion coefficient			ASTM E831
Flow: -40 to 40°C	7.0E-5	cm/cm/°C	ASTM E831
Lateral: -40 to 40°C	8.0E-5	cm/cm/°C	ASTM E831
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	> 1.0E+16	ohms · cm	IEC 60093
Injection	Nominal Value	Unit	
Drying Temperature	95 - 105	°C	
Drying Time	2.0 - 4.0	hr	
Suggested Max Moisture	0.020	%	
Hopper Temperature	60 - 80	°C	
Rear Temperature	230 - 260	°C	
Middle Temperature	250 - 290	°C	
Front Temperature	250 - 290	°C	
Nozzle Temperature	240 - 280	°C	
Processing (Melt) Temp	260 - 290	°C	
Mold Temperature	60 - 90	°C	

NOTE	
1.	5.0 mm/min
2.	Type 1, 50mm/min
3.	Type 1, 50mm/min
4.	Type 1, 50mm/min
5.	Type 1, 50mm/min
6.	1.3 mm/min
7.	2.0 mm/min
8.	1.3 mm/min
9.	80*10*4 sp=62mm
10.	80*10*4 sp=62mm
11.	80*10*4
12.	80*10*4
13.	80*10*4
14.	标准 B (120°C/h), 载荷2 (50N)
15.	Approximate maximum

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

