

CYCOLOY™ MC8800 resin

Polycarbonate + ABS

SABIC Innovative Plastics

Message:

PC/ABS, high heat, high impact, low CTE.

General Information	
Features	Impact resistance, high
	Heat resistance, high
Processing Method	Injection molding
Multi-Point Data	Coefficient of Thermal Expansion vs. Temperature (ASTM E831)
	Compressive Stress vs. Strain (ASTM D695)
	Flexural DMA (ASTM D4065)
	Pressure-Volume-Temperature (PVT - Zoller Method)
	Shear DMA (ASTM D4065)
	Specific Heat vs. Temperature (ASTM D3417)
	Tensile Creep (ASTM D2990)
	Tensile Fatigue
	Tensile Stress vs. Strain (ASTM D638)
	Thermal Conductivity vs. Temperature (ASTM E1530)
	Viscosity vs. Shear Rate (ASTM D3835)

Physical	Nominal Value	Unit	Test Method
Density	1.22	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (265°C/5.0 kg)	10.0	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.40 - 0.60	%	Internal method
Water Absorption			ISO 62
Saturated, 23°C	0.40	%	ISO 62
Equilibrium, 23°C, 50% RH	0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3200	MPa	ISO 527-2/1
Tensile Stress			ISO 527-2/5
Yield	55.0	MPa	ISO 527-2/5
Fracture	58.0	MPa	ISO 527-2/5
Tensile Strain			ISO 527-2/5
Yield	4.2	%	ISO 527-2/5
Fracture	100	%	ISO 527-2/5
Flexural Modulus ¹	3100	MPa	ISO 178

Flexural Stress	95.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ² (23°C)	35	kJ/m ²	ISO 179/1eA
Notched Izod Impact ³			ISO 180/1A
-30°C	10	kJ/m ²	ISO 180/1A
23°C	30	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature ⁴ (1.8 MPa, Unannealed, 64.0 mm Span)	118	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	135	°C	ISO 306/B50
--	137	°C	ISO 306/B120
Linear thermal expansion coefficient			ISO 11359-2
Flow: -40 to 40°C	6.0E-5	cm/cm/°C	ISO 11359-2
Lateral: -40 to 40°C	7.0E-5	cm/cm/°C	ISO 11359-2
Injection	Nominal Value	Unit	
Drying Temperature	110 - 121	°C	
Drying Time	3.0 - 4.0	hr	
Drying Time, Maximum	8.0	hr	
Suggested Max Moisture	0.040	%	
Suggested Shot Size	30 - 80	%	
Rear Temperature	260 - 271	°C	
Middle Temperature	266 - 288	°C	
Front Temperature	271 - 299	°C	
Nozzle Temperature	271 - 299	°C	
Processing (Melt) Temp	282 - 299	°C	
Mold Temperature	77 - 99	°C	
Back Pressure	0.345 - 0.689	MPa	
Screw Speed	40 - 70	rpm	
Vent Depth	0.038 - 0.076	mm	
NOTE			
1.	2.0 mm/min		
2.	80*10*4 sp=62mm		
3.	80*10*4		
4.	80*10*4 mm		

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

