

CYCOLOY™ C2800 resin

Polycarbonate + ABS

SABIC Innovative Plastics

Message:

Non-chlorinated and non-brominated flame retardant PC/ABS offering balanced flow and impact for various applications.

General Information			
UL YellowCard	E45587-236934	E207780-228468	
Additive	Flame retardancy		
Features	Chlorine Free		
	Impact resistance, good		
	Good liquidity		
	Bromine-free		
	Flame retardancy		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			ASTM D792
--	1.17	g/cm ³	ASTM D792
-- ¹	1.18	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/2.16 kg)	16	g/10 min	ASTM D1238
Molding Shrinkage			Internal method
Flow: 3.20mm	0.40 - 0.60	%	Internal method
Transverse flow: 3.20mm	0.40 - 0.60	%	Internal method
Water Absorption			ASTM D570
24 hr	0.10	%	ASTM D570
Equilibrium, 23°C	0.40	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	120		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	2690	MPa	ASTM D638
Tensile Strength ³ (Yield)	58.6	MPa	ASTM D638
Tensile Elongation ⁴			ASTM D638
Yield	5.0	%	ASTM D638
Fracture	50	%	ASTM D638
Flexural Modulus ⁵ (100 mm Span)	2690	MPa	ASTM D790
Flexural Strength ⁶ (Yield, 100 mm Span)	96.5	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	430	J/m	ASTM D256

Instrumented Dart Impact (23°C, Total Energy)	58.3	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, unannealed, 3.20mm	73.9	°C	ASTM D648
1.8 MPa, unannealed, 6.40mm	80.0	°C	ASTM D648
Vicat Softening Temperature	90.6	°C	ASTM D1525 ⁷
Linear thermal expansion coefficient			ASTM E831
Flow: -40 to 60°C	7.2E-5	cm/cm/°C	ASTM E831
Lateral: -40 to 60°C	7.2E-5	cm/cm/°C	ASTM E831
Thermal Conductivity	0.20	W/m/K	ASTM C177
RTI Elec	80.0	°C	UL 746
RTI Imp	70.0	°C	UL 746
RTI	80.0	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+14	ohms	ASTM D257
Volume Resistivity	1.0E+17	ohms·cm	ASTM D257
Dielectric Strength (3.20 mm, in Oil)	18	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
50 Hz	3.00		ASTM D150
60 Hz	3.00		ASTM D150
100 Hz	3.00		ASTM D150
Dissipation Factor			ASTM D150
50 Hz	4.8E-3		ASTM D150
60 Hz	4.8E-3		ASTM D150
Arc Resistance ⁸	PLC 6		ASTM D495
Comparative Tracking Index (CTI)	PLC 1		UL 746
High Amp Arc Ignition (HAI)	PLC 0		UL 746
High Voltage Arc Tracking Rate (HVTR)	PLC 3		UL 746
Hot-wire Ignition (HWI)	PLC 3		UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.889 mm	V-2		UL 94
1.47 mm	V-0		UL 94
2.31 mm	5VB		UL 94
Oxygen Index	35	%	ASTM D2863
Injection	Nominal Value	Unit	
Drying Temperature	77.0 - 82.0	°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	210 - 254	°C
Middle Temperature	216 - 260	°C
Front Temperature	227 - 274	°C
Nozzle Temperature	232 - 274	°C
Processing (Melt) Temp	232 - 274	°C
Mold Temperature	49.0 - 71.0	°C
Back Pressure	0.345 - 0.689	MPa
Screw Speed	40 - 70	rpm
Vent Depth	0.038 - 0.076	mm

NOTE

1.	Color
2.	50 mm/min
3.	Type 1, 50mm/min
4.	Type 1, 50mm/min
5.	2.6 mm/min
6.	2.6 mm/min
7.	标准 B (120°C/h), 载荷2 (50N)
8.	Tungsten electrode

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

