

Makrolon® SF800

Polycarbonate

Covestro - Polycarbonates

Message:

MVR (300 °C/1.2 kg) 5.0 cm³/10 min; structural foam; 5 % glass fiber reinforced; flame retardant; high viscosity; easy release; in combination with an appropriate blowing agent for the production of structural foam moldings

General Information			
UL YellowCard	E41613-233192		
Filler / Reinforcement	Glass Fiber,5.0% Filler by Weight		
Additive	Flame Retardant		
Features	Flame Retardant		
	Good Mold Release		
	High Viscosity		
Uses	Structural Foam		
RoHS Compliance	RoHS Compliant		
Physical	Nominal Value	Unit	Test Method
Apparent Density ¹	0.65	g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	6.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	5.00	cm ³ /10min	ISO 1133
Molding Shrinkage ²			ISO 294-4
Across Flow : 2.00 mm	0.55	%	
Flow : 2.00 mm	0.70	%	
Water Absorption			ISO 62
Saturation, 23°C	0.30	%	
Equilibrium, 23°C, 50% RH	0.10	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	3000	MPa	ISO 527-2/1
Tensile Stress			ISO 527-2/5
Yield, 23°C	64.0	MPa	
Break, 23°C	50.0	MPa	
Tensile Strain			ISO 527-2/5
Yield, 23°C	5.4	%	
Break, 23°C	40	%	
Flexural Modulus ³ (23°C)	2900	MPa	ISO 178
Flexural Stress ⁴ (23°C)	100	MPa	ISO 178
Flexural Strain at Flexural Strength ⁵ (23°C)	6.2	%	ISO 178
ISO Shortname	ISO 7391-PC,MFR,(,,)-05-9,GF5		
Impact	Nominal Value	Unit	Test Method

Charpy Unnotched Impact Strength			ISO 179/1eU
-60°C, Complete Break	150	kJ/m ²	
-30°C, Complete Break	160	kJ/m ²	
23°C, Complete Break	220	kJ/m ²	
Notched Izod Impact Strength ⁶ (23°C, Complete Break)	12	kJ/m ²	ISO 7391
Multi-Axial Instrumented Impact Energy			ISO 6603-2
-30°C	25.0	J	
23°C	30.0	J	
Multi-Axial Instrumented Impact Peak Force			ISO 6603-2
-30°C	4900	N	
23°C	4400	N	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Unannealed	141	°C	ISO 75-2/B
1.8 MPa, Unannealed	132	°C	ISO 75-2/A
Vicat Softening Temperature	144	°C	ISO 306/B50
CLTE			ISO 11359-2
Flow : 23 to 55°C	5.5E-5	cm/cm/°C	
Transverse : 23 to 55°C	7.0E-5	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index			IEC 60112
Solution A	175	V	
Solution B	125	V	
Flammability	Nominal Value	Unit	Test Method
	V-0		
Flame Rating ⁷ (6.00 mm)	5VA		UL 94
Glow Wire Flammability Index			IEC 60695-2-12
1.50 mm	960	°C	
3.00 mm	960	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.750 mm	930	°C	
1.50 mm	930	°C	
3.00 mm	930	°C	
Oxygen Index ⁸	36	%	ISO 4589-2
NOTE			
1.	Pellets		
2.	60x60x2 mm, 500 bar		
3.	2.0 mm/min		

4.	2.0 mm/min
5.	2 mm/min
6.	Based on ISO 180-A, 3 mm
7.	Foamed; density in the foamed state: 900 to 1000 kg/m ³
8.	Procedure A

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



WECHAT