

Sinkral® C 333/M2

Acrylonitrile Butadiene Styrene

Versalis S.p.A.

Message:

Special low gloss grade for injection molding which combines medium heat resistance with a good balance between stiffness and toughness.

Designation: Thermoplastic ISO 2580-ABS 1, MG, 105-04-16-20

Main application for this grade is automotive interiors, for example dashboard instruments and panels, where a matt surface finish and high thermal resistance are highly desirable. The choice of this material, when properly processed in tools having a suitable quality finish, can mean the elimination of subsequent painting operations with a consequent reduction in part costs together with easier recycling.

Sinkral C 333/M2 can be supplied with improved UV resistance (U).

General Information	
Features	Balanced Stiffness/Toughness
	Low Gloss
	Medium Heat Resistance
Uses	Automotive Interior Parts
Forms	Pellets
Processing Method	Injection Molding
Multi-Point Data	Specific Volume vs Temperature (ISO 11403-2)
	Viscosity vs. Shear Rate (ISO 11403-2)

Physical	Nominal Value	Unit	Test Method
Density	1.04	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	5.0	g/10 min	ISO 1133
Molding Shrinkage	0.40 to 0.60	%	Internal Method
Water Absorption (23°C, 24 hr)	0.30	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	107		ISO 2039-2
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ¹	35.0	MPa	ASTM D638
Tensile Elongation ² (Break)	65	%	ASTM D638
Flexural Modulus ³	2000	MPa	ASTM D790
Flexural Strength ⁴	55.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	12	kJ/m ²	DIN 53453
Charpy Unnotched Impact Strength			DIN 53453
-40°C	No Break		
23°C	No Break		
Notched Izod Impact			
-40°C, 3.20 mm	95	J/m	ISO 180/4A

-20°C, 3.20 mm	110	J/m	ISO 180/4A
0°C, 3.20 mm	140	J/m	ISO 180/4A
23°C, 3.20 mm	190	J/m	ISO 180/4A
-40°C ⁵	8.0	kJ/m ²	ISO 180/1A
23°C ⁶	14	kJ/m ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Annealed)	102	°C	ASTM D648
Vicat Softening Temperature			
--	108	°C	ISO 306/A120
--	103	°C	ISO 306/B120
CLTE - Flow	9.0E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.17	W/m/K	ASTM C177
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+14	ohms	IEC 60093
Volume Resistivity	1.0E+15	ohms·cm	IEC 60093
Electric Strength	30	kV/mm	IEC 60243-1
Dielectric Constant (1 kHz)	3.10		IEC 60250
Dissipation Factor (1 kHz)	0.015		IEC 60250
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.50 mm)	HB		UL 94
Glow Wire Ignition Temperature (3.00 mm)	650	°C	IEC 60695-2-13
Additional Information	Nominal Value		
Designation	Thermoplastic ISO 2580-ABS 1,MG,105-04-16-20		
Injection	Nominal Value	Unit	
Drying Temperature	80.0	°C	
Drying Time	2.0 to 4.0	hr	
Processing (Melt) Temp	230 to 270	°C	
Mold Temperature	50.0 to 80.0	°C	
NOTE			
1.	50 mm/min		
2.	50 mm/min		
3.	2.0 mm/min		
4.	2.0 mm/min		
5.	4 mm		
6.	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

