



Sinkral[®]
ABS Resin

L 320

TECHNICAL DATA SHEET

Product description

Sinkral L 320 is a general purpose, high flow injection moulding grade having good impact resistance coupled with an excellent gloss.

Designation: Thermoplastic ISO 2580-ABS 1, MG, 095-25-16-25

Applications

Widely used in the small domestic appliances sector, vacuum cleaners, toys, telephones and consumer electronics.

Typical processing data

Injection moulding:

- pre-drying required at 80°C for 2 - 4 hr in an air circulating oven
- melt temperature 220 - 250°C
- mould temperature 40 - 70°C

General information

This grade can also be supplied in antistatic (/S) and/or improved UV resistance (/U) versions and a wide range of colours.

The composition of this grade meets European Regulations for packaging in contact with foodstuffs.

Officially rated UL 94HB at 1.5 mm thickness (File: UL E83071).

Properties	Test conditions	Test methods	Units	Values	
General					
Density		ISO 1183	g/cm ³	1.04	
Water absorption	24 h - 23°C	ASTM D 570	%	0.3	
Rheological					
Melt flow rate (MFR)	220°C - 10 kg	ISO 1133	g/10 min	27	
Mechanical					
Tensile strength	50 mm/min	ASTM D 638	MPa	45	
Strain at break	50 mm/min	ASTM D 638	%	20	
Flexural strength	2 mm/min	ASTM D 790	MPa	69	
Flexural modulus	2 mm/min	ASTM D 790	MPa	2500	
Izod impact strength, notched	+23°C - thickness 3.2 mm	ISO 180/4A	J/m	200	
	0°C - thickness 3.2 mm	ISO 180/4A	J/m	140	
	- 20°C - thickness 3.2 mm	ISO 180/4A	J/m	120	
	- 40°C - thickness 3.2 mm	ISO 180/4A	J/m	100	
	+23°C - thickness 4 mm	ISO 180/1A	kJ/m ²	14	
	- 40°C - thickness 4 mm	ISO 180/1A	kJ/m ²	8	
Charpy impact strength, notched	+23°C	DIN 53453	kJ/m ²	11	
	unnotched	+23°C	DIN 53453	kJ/m ²	NB
	unnotched	-40°C	DIN 53453	kJ/m ²	NB
Rockwell hardness	scale R	ISO 2039/2	-	R113	
Thermal					
Vicat softening temperature	10 N - 120°C/h	ISO 306/A120	°C	103	
	50 N - 120°C/h	ISO 306/B120	°C	99	
Deflection temperature under load (annealed)	1.8 MPa - 120°C/h	ASTM D 648	°C	99	
Coefficient of linear thermal expansion		ASTM D 696	10 ⁻⁵ /°C	9	
Thermal conductivity		ASTM C 177	W/(K·m)	0.17	
Moulding shrinkage		internal	%	0.4 - 0.6	
Flammability					
Flame behaviour	thickness 1.5 mm	UL 94	class	HB	
Glow wire test (GWT)	thickness 3 mm	IEC 60695-2-1	°C	650	
Electrical					
Surface resistivity	dry	IEC 60093	ohm	10E14	
Volume resistivity	dry	IEC 60093	ohm.cm	10E15	
Dielectric strength	dry	IEC 60243	kV/mm	30	
Dielectric constant (relative permittivity)	1000 Hz - dry	IEC 60250	-	3.1	
Dissipation factor	1000 Hz - dry	IEC 60250	-	15-10E-3	

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All indicated data refer to natural grades.

The data, information and suggestions are provided for guidance purposes only.

The Company accepts no responsibility for the results obtained therefrom, as neither for their utilization in infringement of possible patent rights.

However the Company will provide the guaranteed values for each product on demand.

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