



versalis

Technical Data Sheet

## Sinkral<sup>®</sup> ABS Resin

**L 322**

Sinkral L 322 by continuous Mass, 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 and large household 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

Sinkral L 322 is available in natural color and upon request in colored version.

This product in its natural version complies by composition with requirements of the main Regulations for plastic materials intended for food contact (including Regulation (EU) N°. 10/2011 and following amendments).



Properties	Test conditions	Test methods	Units	Values
<b>General</b>				
Density		ISO 1183	g/cm <sup>3</sup>	1.04
Water absorption	24 h / 23°C	ASTM D 570	%	0.3
<b>Rheological</b>				
Melt flow rate (MFR)	220°C - 10 kg	ISO 1133	g/10 min	26
<b>Mechanical</b>				
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	2350
Izod impact strength, notched	+23°C - thickness 3.2 mm	ISO 180/4A	J/m	170
	0°C - thickness 3.2 mm	ISO 180/4A	J/m	100
	-20°C - thickness 3.2 mm	ISO 180/4A	J/m	70
	-40°C - thickness 3.2 mm	ISO 180/4A	J/m	50
	+23°C - thickness 4,0 mm	ISO 180/1A	kJ/m <sup>2</sup>	13
	-40°C - thickness 4,0 mm	ISO 180/1A	kJ/m <sup>2</sup>	6
Charpy impact strength, notched unnotched unnotched	+23°C	DIN 53453	kJ/m <sup>2</sup>	10
	+23°C	DIN 53453	kJ/m <sup>2</sup>	NB
	-40°C	DIN 53453	kJ/m <sup>2</sup>	NB
Rockwell hardness	scale R	ISO 2039/2	-	R109
<b>Thermal</b>				
Vicat softening temperature	10 N - 120°C/h	ISO 306/A 120	°C	99
	50 N - 120°C/h	ISO 306/B 120	°C	96
Deflection temperature under load (annealed)	1.8 MPa - 120°C/h	ASTM D 648	°C	96
Coefficient of linear thermal expansion		ASTM D 696	10 <sup>-5</sup> /°C	9
Thermal conductivity		ASTM C 177	W/(K·m)	0,17
Moulding shrinkage		internal method	%	0.4 - 0.6
<b>Flammability</b>				
Flame behaviour (internal test)	thickness 1.5 mm	UL 94	class	HB
Glow wire test (GWT)	thickness 3,0 mm	IEC 60695-2-1	°C	650
<b>Electrical</b>				
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

