# SINKRAL® L 322

ABS — Versalis S.p.A

## Product Texts

Symbol according to ISO 1043-1: ABS
Designation: Thermoplastics ISO 2580-ABS 1,MG,095-25-16-25

SINKRAL L 322 by continuos mass process, is a general purpose, high flow injection moulding grade with a good impact resistance coupled with an excellent gloss.

Applications:
Widely used in small and large household appliances sector, vacuum cleaners, toys, telephones and consumer electronics.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Melt volume-flow rate, MVR | **26** | cm³/10min | ISO 1133 |
| Temperature | **220** | °C | - |
| Load | **10** | kg | - |
| [C] Density of melt | **960** | kg/m³ | - |
| [C] Spec. heat capacity of melt | **2150** | J/(kg K) | - |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Tensile Modulus | **2350** | MPa | ISO 527 |
| [C] Yield stress | **42** | MPa | ISO 527 |
| [C] Yield strain | **3** | % | ISO 527 |
| [C] Nominal strain at break | **12** | % | ISO 527 |
| [C] Charpy impact strength, +23°C | **140** | kJ/m² | ISO 179/1eU |
| [C] Charpy impact strength, -30°C | **105** | kJ/m² | ISO 179/1eU |
| [C] Charpy notched impact strength, +23°C | **12** | kJ/m² | ISO 179/1eA |
| [C] Charpy notched impact strength, -30°C | **5** | kJ/m² | ISO 179/1eA |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Glass transition temperature, 10°C/min | **100** | °C | ISO 11357-1/-2 |
| [C] Temp. of deflection under load, 1.80 MPa | **83** | °C | ISO 75-1/-2 |
| [C] Vicat softening temperature, B | **96** | °C | ISO 306 |
| [C] Coeff. of linear therm. expansion, parallel | **90** | E-6/K | ISO 11359-1/-2 |
| [C] Burning Behav. at 1.5 mm nom. thickn. | **HB** | class | IEC 60695-11-10 |
| Thickness tested | **1.5** | mm | - |
| Yellow Card available | **yes** | - | - |

[C]: CAMPUS

| Electrical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Relative permittivity, 1MHz | **3.1** | - | IEC 62631-2-1 |
| [C] Dissipation factor, 1MHz | **150** | E-4 | IEC 62631-2-1 |
| [C] Volume resistivity | **1E13** | Ohm*m | IEC 62631-3-1 |
| [C] Surface resistivity | **1E14** | Ohm | IEC 62631-3-2 |
| [C] Electric strength | **30** | kV/mm | IEC 60243-1 |
| [C] Comparative tracking index | **600** | - | IEC 60112 |

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| Other properties | Value | Unit | Test Standard |
|---|---|---|---|
| [C] Water absorption | **0.6** | % | Sim. to ISO 62 |
| [C] Humidity absorption | **0.2** | % | Sim. to ISO 62 |

| | | | |
|---|---|---|---|
| [C] Density | **1040** | kg/m³ | ISO 1183 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Processing conditions acc. ISO | **2580** | - | ISO ....-2 |
| [C] Injection Molding, melt temperature | **250** | °C | ISO 294 |
| Injection Molding, mold temperature | **60** | °C | ISO 294 |
| Injection Molding, injection velocity | **200** | mm/s | ISO 294 |
| Injection Molding, pressure at hold | **70** | MPa | ISO 294 |

[C]: CAMPUS

## Characteristics

**Processing**
Injection Molding

**Special Characteristics**
Heat stabilized or stable to heat

**Delivery form**
Pellets

**Regional Availability**
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

## Other text information

**Injection molding**

Injection Molding
PREPROCESSING
Drying conditions:
Drying temperature 80 °C
Drying time 2 - 4 h
Maximum water content 0.2 %

PROCESSING
Typical processing temperature range:
Melt temperature 230 - 270 °C
Mold temperature 40 - 70 °C