

## SH 109

ABS Resin

Technical Data Sheet

Sinkral® SH 109 is an ABS with high thermal properties and very good mechanical characteristics.

Sinkral® SH 109 has high processing stability which results in a very good workability. It has a very low volatile organic content.

### Applications

Sinkral® SH 109 is used in sectors such as:

- automotive
- transportation

### Typical processing data

Extrusion:

- we suggest drying for 4h at 80°C
- melt temperature 180 - 220°C

Injection moulding:

- dry for 4h at 80°C
- melt temperature 240°C
- mould temperature 70°C

### Certification

✓ EMVSS 302

### Storage

- ⚠ Store away from atmospheric agents and direct sunlight, away from sources of heat and light.
- 🕒 The product, if stored correctly, keeps its characteristics for at least fifteen months.

### General information

Sinkral® SH 109 is available in different versions:

- natural color
- black version (SH 109 16177).



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Property	Test Conditions	Test method	Units	Values
<b>General</b>				
Water absorption	24h - 23°C	ISO 62	%	0,3
Density	-	ISO 1183	g/cm <sup>3</sup>	1,04
<b>Rheological</b>				
Melt flow rate	220°C - 10kg	ISO 1133	g/10'	5
<b>Mechanical</b>				
Strain at yield	50 mm / min	ISO 527	%	2,4
Tensile stress at yield	50 mm/min	ISO 527	MPa	48
Tensile modulus	1 mm/min	ISO 527	MPa	2450
Charpy impact strength, notched	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	17
Izod impact strength, notched	+23°C - 4mm	ISO 180/1A	kJ/m <sup>2</sup>	18
<b>Thermal</b>				
Coefficient of linear thermal expansion	-	ISO 11359-2	10 <sup>-5</sup> /°C	9
Thermal conductivity	-	ASTM C 177	W/(K·m)	0,17
Moulding shrinkage	-	ISO 294/4	%	0,4 ÷ 0,6
Deflection temperature under load (annealed)	0,45 MPa - 120°C/h	ISO 75 B	°C	105
Deflection temperature under load (annealed)	1,82 MPa - 120°C/h	ISO 75 A	°C	99
Vicat softening temperature	50 N - 50°C/h	ISO 306/B	°C	109
Vicat softening temperature	10 N - 50°C/h	ISO 306/A	°C	114
<b>Flammability</b>				
Flame behaviour	1,5 mm	UL 94	cl.	HB
Glow wire test (GWT)	3 mm	IEC 60695-2-10	°C	650
<b>Electrical</b>				
Dielectric constant (relative permittivity)	1000 Hz secco/dry	IEC 60250	-	3,1
Dissipation factor	1000 Hz secco/dry	IEC 60250	-	15·10E-3
Surface resistivity	secco / dry	IEC 60093	ohm	10E14
Volume resistivity	secco / dry	IEC 60093	ohm·cm	10E15
Dielectric strength	secco / dry	IEC 60243	kV/mm	30

