

SINKRAL® D 232/M3

ABS

Versalis S.p.A

Product Texts

Symbol according to ISO 1043-1: ABS

Designation: Thermoplastics ISO 2580-ABS 1,EGN,105-08-09-15

Special low gloss extrusion / co-extrusion grade, with good flow.

Applications:

Sinkral D 232/M3 is widely used in the extrusion / co-extrusion of foils, when a very high matt appearance is required, as well as in the extrusion of profiles.

Rheological properties **Value** **Unit** **Test Standard****ISO Data**

Melt volume-flow rate, MVR	8	cm ³ /10min	ISO 1133
Temperature	220	°C	ISO 1133
Load	10	kg	ISO 1133

Mechanical properties **Value** **Unit** **Test Standard****ISO Data**

Tensile Modulus	1500	MPa	ISO 527-1/-2
Yield stress	29	MPa	ISO 527-1/-2
Yield strain	3.5	%	ISO 527-1/-2
Nominal strain at break	>50	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	170	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	9	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	7	kJ/m ²	ISO 179/1eA

Thermal properties **Value** **Unit** **Test Standard****ISO Data**

Glass transition temperature, 10°C/min	109	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	78	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	101	°C	ISO 306
Coeff. of linear therm. expansion, parallel	90	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
UL recognition	UL	-	-

Electrical properties **Value** **Unit** **Test Standard****ISO Data**

Relative permittivity, 1MHz	3.1	-	IEC 60250
Dissipation factor, 1MHz	150	E-4	IEC 60250
Volume resistivity	1E13	Ohm*m	IEC 60093
Surface resistivity	1E14	Ohm	IEC 60093
Electric strength	30	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

Other properties **Value** **Unit** **Test Standard****ISO Data**

Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1040	kg/m ³	ISO 1183

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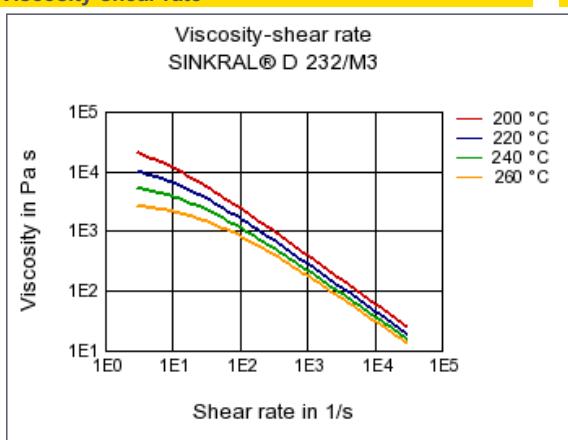
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Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	960	kg/m ³	-
Spec. heat capacity of melt	2150	J/(kg K)	-

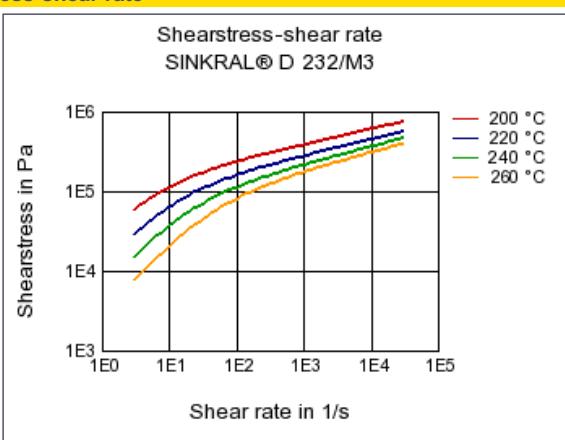
Test specimen production	Value	Unit	Test Standard
ISO Data			
Processing conditions acc. ISO	2580	-	ISO-2
Injection Molding, melt temperature	250	°C	ISO 294
Injection Molding, mold temperature	60	°C	ISO 10724
Injection Molding, injection velocity	200	mm/s	ISO 294
Injection Molding, pressure at hold	70	MPa	ISO 294

Diagrams

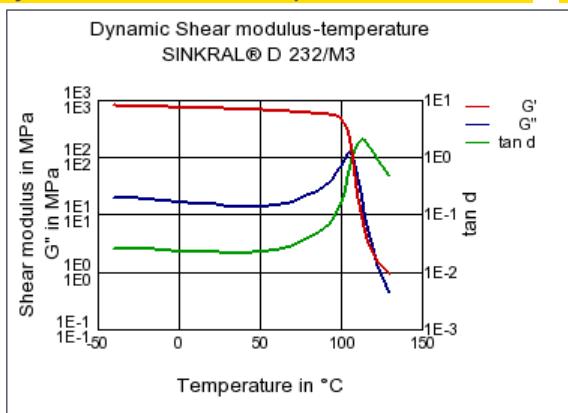
Viscosity-shear rate



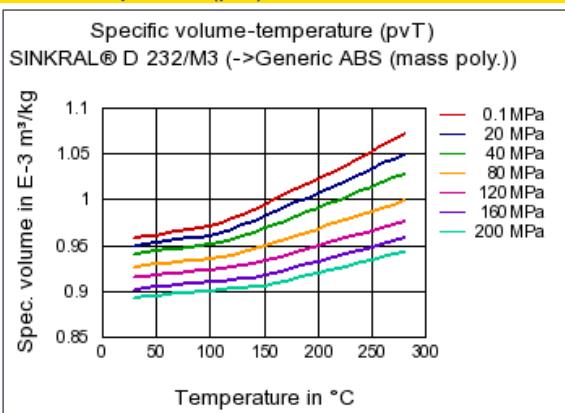
Shearstress-shear rate



Dynamic Shear modulus-temperature



Specific volume-temperature (pvT)

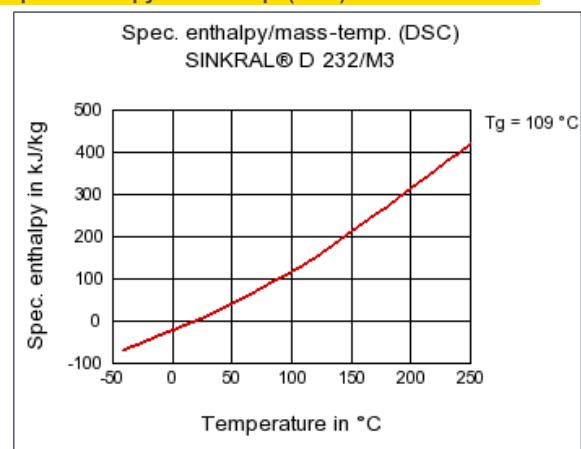


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Spec. enthalpy/mass-temp. (DSC)



Characteristics

Processing

Profile Extrusion, Sheet Extrusion, Other Extrusion, Calandering, Thermoforming

Special Characteristics

Heat stabilized or stable to heat

Delivery form

Pellets

Other text information

Other extrusion

extrusion

PREPROCESSING

Drying conditions if no venting:

Drying temperature 80 °C

Drying time 2- 4 h

Maximum water content 0.2 %

PROCESSING

Typical processing temperature range:

Melt temperature 180-220 °C

Profile extrusion

PREPROCESSING

Drying conditions if no venting:

Drying temperature 80 °C

Drying time 2- 4 h

Maximum water content 0.2 %

PROCESSING

Typical processing temperature range:

Melt temperature 180 - 220 °C

Sheet extrusion

PREPROCESSING

Drying conditions if no venting:

Drying temperature 80 °C

Drying time 2- 4 h

Maximum water content 0.2 %

PROCESSING

Typical processing temperature range:

Melt temperature 180 - 220 °C