


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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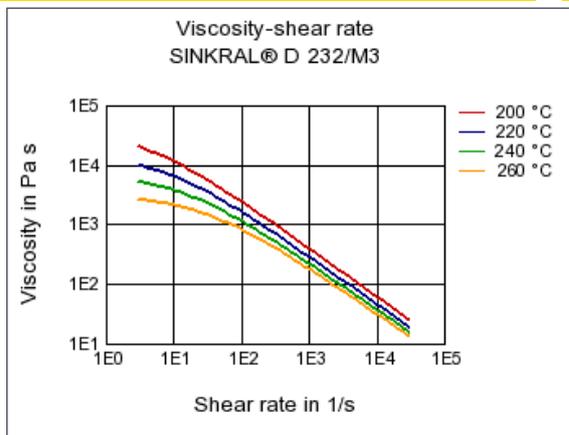
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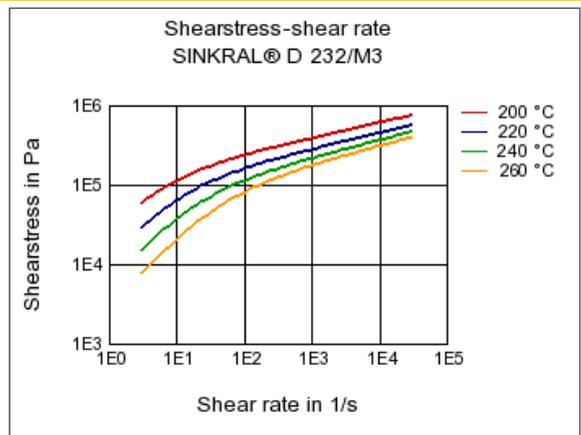
Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	960	kg/m ³	-
Spec. heat capacity of melt	2150	J/(kg K)	-
Test specimen production			
ISO Data			
Processing conditions acc. ISO	2580	-	ISO-2
Injection Molding, melt temperature	250	°C	ISO 294
Injection Molding, mold temperature	60	°C	ISO 10724
Injection Molding, injection velocity	200	mm/s	ISO 294
Injection Molding, pressure at hold	70	MPa	ISO 294

Diagrams

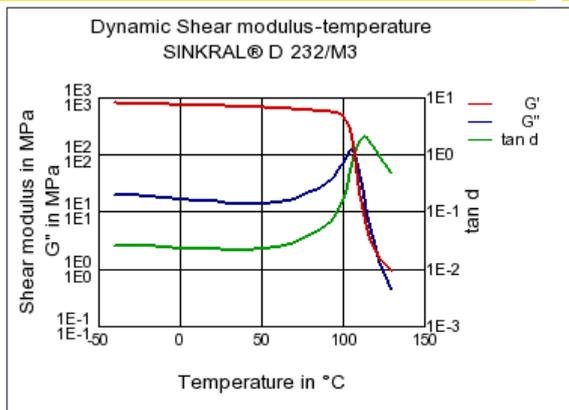
Viscosity-shear rate



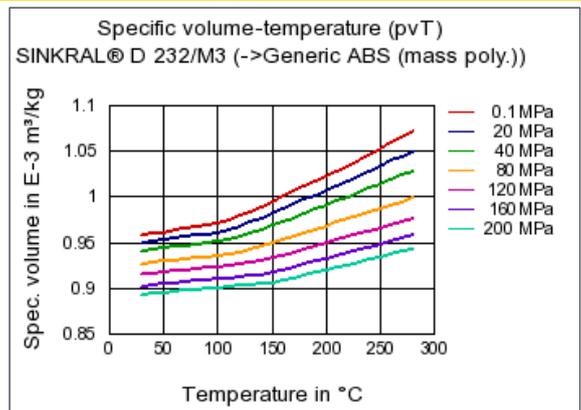
Shearstress-shear rate

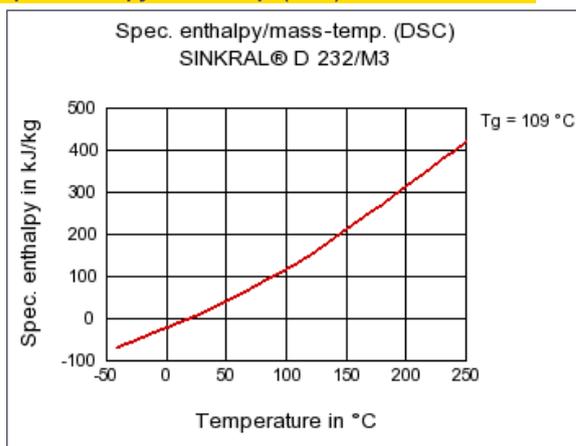


Dynamic Shear modulus-temperature



Specific volume-temperature (pvT)



Spec. enthalpy/mass-temp. (DSC)**Characteristics****Processing**

Profile Extrusion, Sheet Extrusion, Other Extrusion, Calendering, 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