SINKRAL® E 332

ABS Versalis S.p.A

Product Texts

Symbol according to ISO 1043-1: ABS
Designation: Thermoplastics ISO 2580-ABS 1,MGN,105-08-16-20

SINKRAL E 332 is a medium heat injection moulding grade offering good flow and good impact resistance together with an excellent thermal stability during its processing.

Applications:

Thanks to its low Yellow Index and its colour constancy, it is suitable for self-colouring, mainly in the automotive industry (internal trim parts).

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	10	cm³/10min	ISO 1133
Temperature	220	°C	ISO 1133
Load	10	kg	ISO 1133

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2150	MPa	ISO 527-1/-2
Yield stress	44	MPa	ISO 527-1/-2
Yield strain	3	%	ISO 527-1/-2
Nominal strain at break	40	%	ISO 527-1/-2
Charpy impact strength (+23°C)	170	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	130	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	15	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	7	kJ/m²	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)	83	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	103	°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/m³	ISO 1183

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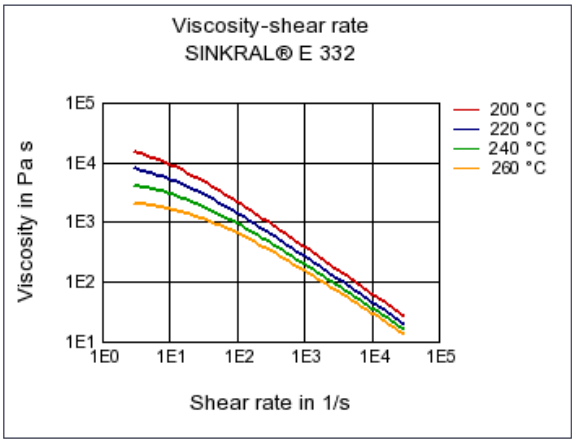
Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	960	kg/m³	-
Spec. heat capacity of melt	2150	J/(kg K)	-

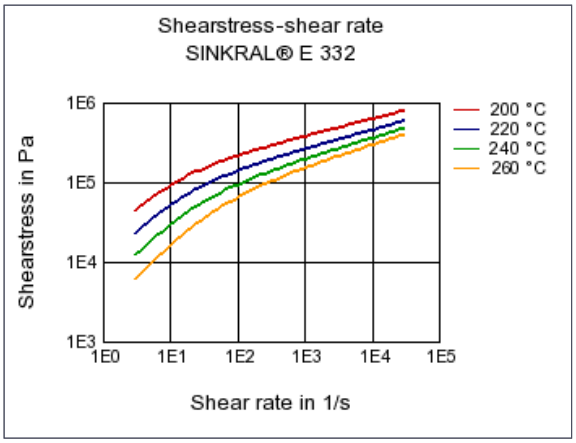
Test specimen production	Value	Unit	Test Standard
ISO Data			
Processing conditions acc. ISO	2580	-	ISO ....-2
Injection Molding, melt temperature	250	°C	ISO 294
Injection Molding, mold temperature	60	°C	ISO 10724
Injection Molding, injection velocity	200	mm/s	ISO 294
Injection Molding, pressure at hold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

Diagrams

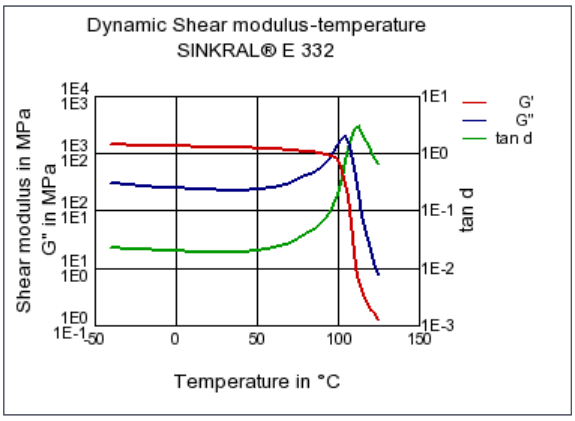
Viscosity-shear rate



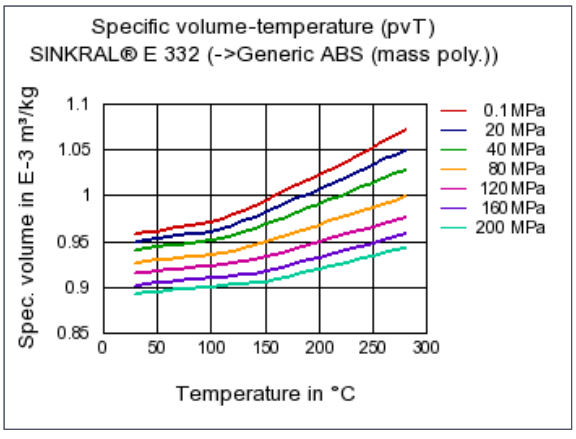
Shearstress-shear rate



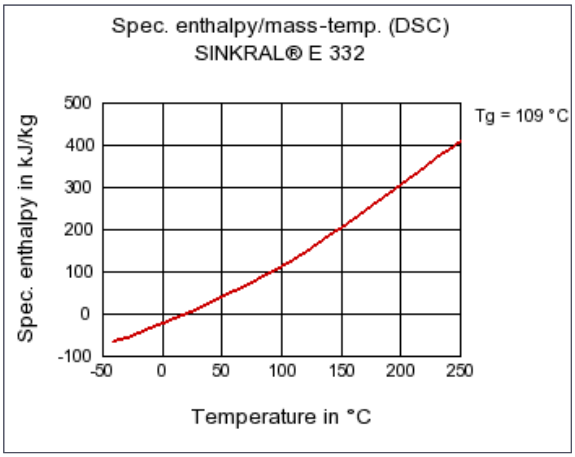
Dynamic Shear modulus-temperature



Specific volume-temperature (pvT)



Spec. enthalpy/mass-temp. (DSC)



Characteristics

Processing
Injection Molding, Sheet Extrusion, Other Extrusion, Thermoforming

Special Characteristics
Heat stabilized or stable to heat

Delivery form
Pellets

Other text information

Injection Molding
0 Injection Molding
PREPROCESSING
Drying conditions:
Drying temperature80 °C
Drying time2- 4 h
Maximum water content0.2 %

PROCESSING
Typical processi ng temperature range:
Melt temperature240 - 280 °C
Mold temperature40-70 °C

Other extrusion
Otherextrusion
PREPROCESSING
Drying conditions if no venting:
Drying temperature80 °C
Drying time2- 4 h
Maximum water content0.2%

PROCESSING
Typical processing temperature range:
Melt temperature190 - 230 °C

Sheet extrusion
PREPROCESSING
Drying conditions if no venting:
Drying temperature80 °C
Drying time2- 4 h
Maximum water content0.2 %

PROCESSING
Typical processing temperature range:

Melt temperature	190 - 230 °C