

**SINKRAL® B 432/E**

ABS

Versalis S.p.A.

**Product Texts**

Symbol according to ISO 1043-1: ABS

Designation: Thermoplastics ISO 2580-ABS 1,EGN,105-04-16-20

Sinkral B 432/E is a general purpose extrusion grade which exhibits a good balance between rigidity and toughness.

Applications:

Sheets with good surface finish (co-extruded or not and with high draw ratios) for a variety of uses in sectors such as refrigeration, sanitary, automotive, packaging and furniture (profiles).

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

Melt volume-flow rate, MVR	4	cm <sup>3</sup> /10min	ISO 1133
Temperature	220	°C	ISO 1133
Load	10	kg	ISO 1133

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

Tensile Modulus	2300	MPa	ISO 527-1/-2
Yield stress	45	MPa	ISO 527-1/-2
Yield strain	3	%	ISO 527-1/-2
Nominal strain at break	30	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	140	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	18	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	8	kJ/m <sup>2</sup>	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	104	°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 <sup>3</sup>	ISO 1183

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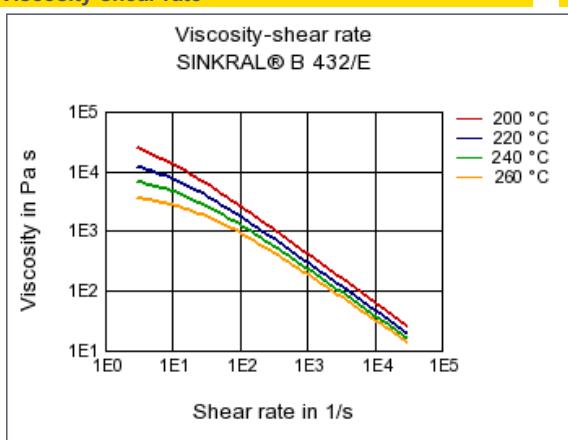
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Rheological calculation properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Density of melt	960	kg/m <sup>3</sup>	-
Spec. heat capacity of melt	2150	J/(kg K)	-

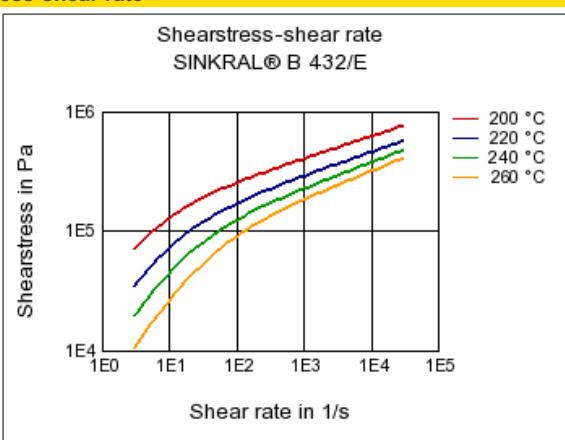
Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
Processing conditions acc. ISO	2580	-	ISO ....-2
Injection Molding, melt temperature	250	°C	ISO 294
Injection Molding, mold temperature	60	°C	ISO 10724
Injection Molding, injection velocity	200	mm/s	ISO 294
Injection Molding, pressure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

## Diagrams

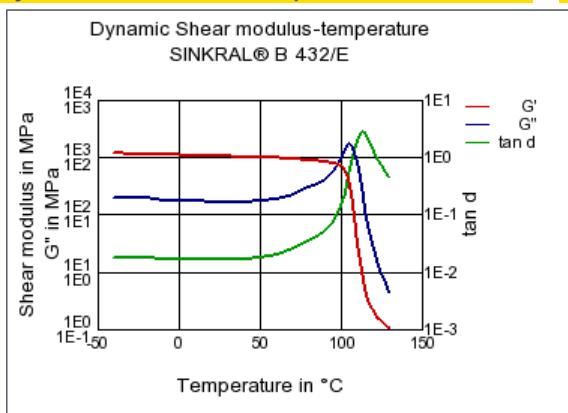
### Viscosity-shear rate



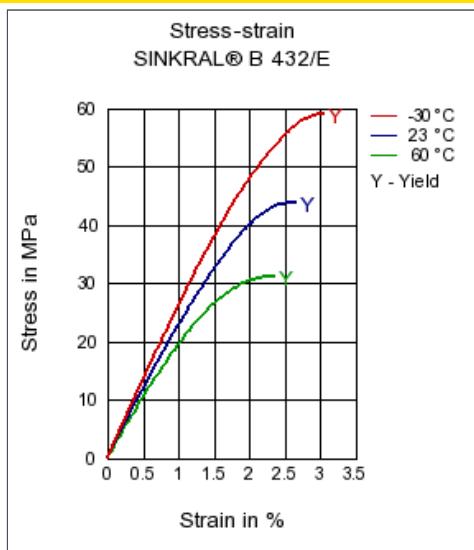
### Shearstress-shear rate



### Dynamic Shear modulus-temperature



### Stress-strain

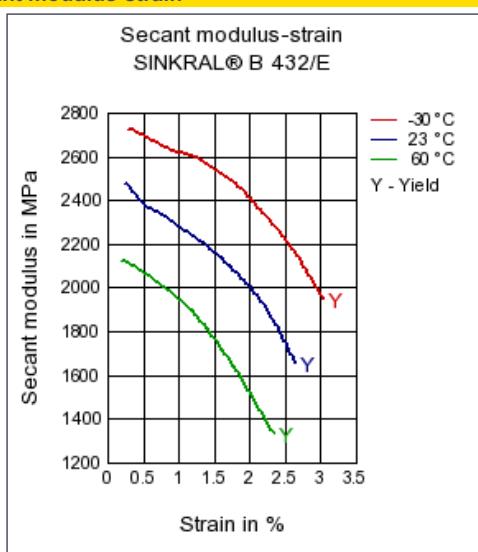


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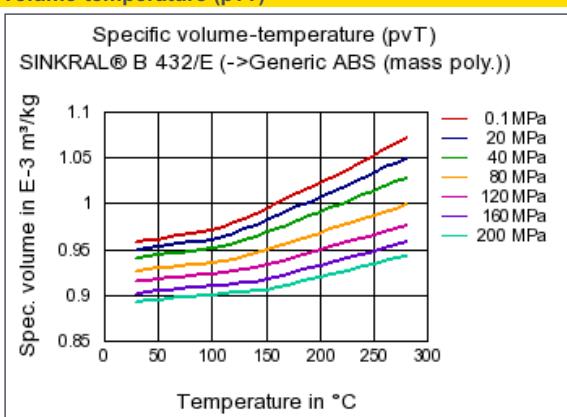
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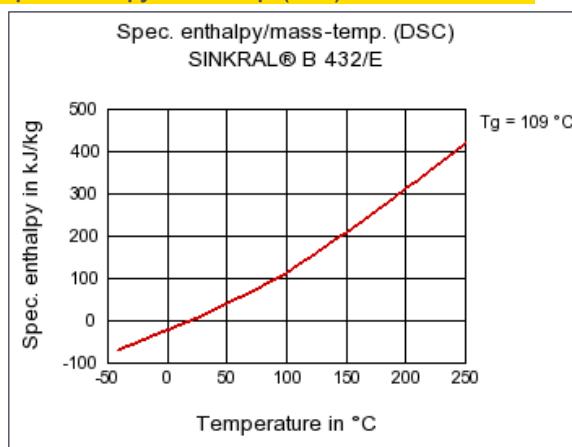
### Secant modulus-strain



### Specific volume-temperature (pvT)



### Spec. enthalpy/mass-temp. (DSC)



### Characteristics

#### Processing

Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion, Blow Molding, Thermoforming

#### Special Characteristics

Heat stabilized or stable to heat

#### Delivery form

Pellets

#### Other text information

#### Film extrusion

##### PREPROCESSING

Drying conditions if no venting:

Drying temperature 80 °C

Drying time 2- 4 h

Maximum water content 0.2 %

##### PROCESSING

Typical processing temp eraturerange:

Melt temperature 190 - 230 °C

#### Other extrusion

##### Otherextrusion

##### PREPROCESSING

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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 190 - 230 °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 190 - 230 °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 190 - 230 °C