

## Single-point data

### Rheological properties

Melt volume-flow rate	<b>2</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>380</b>	°C	ISO 1133
Load	<b>5</b>	kg	ISO 1133
Molding shrinkage (parallel)	-	%	ISO 2577,294-4
Molding shrinkage (normal)	-	%	ISO 2577,294-4

### Mechanical properties

Tensile modulus	<b>11000</b>	MPa	ISO 527-1/-2
Yield stress	*	MPa	ISO 527-1/-2
Yield strain	*	%	ISO 527-1/-2
Nominal strain at break	*	%	ISO 527-1/-2
Stress at 50% strain	*	MPa	ISO 527-1/-2
Stress at break	<b>165</b>	MPa	ISO 527-1/-2
Strain at break	<b>2.5</b>	%	ISO 527-1/-2
Tensile creep modulus (1h)	-	MPa	ISO 899-1
Tensile creep modulus (1000h)	-	MPa	ISO 899-1
Charpy impact strength (+23°C)	<b>70</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	<b>75</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	<b>10</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	<b>9</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Tensile notched impact strength (+23°C)	-	kJ/m <sup>2</sup>	ISO 8256/1
Puncture - maximum force (+23°C)	-	N	ISO 6603-2
Puncture - maximum force (-30°C)	-	N	ISO 6603-2
Puncture energy (+23°C)	-	J	ISO 6603-2
Puncture energy (-30°C)	-	J	ISO 6603-2

### Thermal properties

Melting temperature (10°C/min)	<b>343</b>	°C	ISO 11357-1/-3
Glass transition temperature (10°C/min)	-	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	-	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	-	°C	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	-	°C	ISO 75-1/-2
Vicat softening temperature (50°C/h 50N)	-	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	-	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	-	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5mm nom. thickn.	<b>V-1</b>	class	IEC 60695-11-10
Thickness tested	<b>1.5</b>	mm	IEC 60695-11-10
UL recognition	-	-	-
Burning Behav. at thickness h	<b>V-0</b>	class	IEC 60695-11-10
Thickness tested	<b>0.8</b>	mm	IEC 60695-11-10
UL recognition	-	-	-
Burning Behav. 5V at thickn. h	-	class	IEC 60695-11-20
Thickness tested	-	mm	IEC 60695-11-20
UL recognition	-	-	-
Oxygen index	<b>45</b>	%	ISO 4589-1/-2

**Electrical properties**

Relative permittivity (100 Hz)	-	-	IEC 60250
Relative permittivity (1 MHz)	-	-	IEC 60250
Dissipation factor (100 Hz)	-	E-4	IEC 60250
Dissipation factor (1 MHz)	-	E-4	IEC 60250
Volume resistivity	-	Ohm*m	IEC 60093
Surface resistivity	-	Ohm	IEC 60093
Electric strength	-	kV/mm	IEC 60243-1
Comparative tracking index	-	-	IEC 60112

**Other properties**

Water absorption	-	%	Similar to ISO 62
Humidity absorption	-	%	Similar to ISO 62
Density	-	kg/m <sup>3</sup>	ISO 1183

**Material specific properties**

Viscosity number	-	cm <sup>3</sup> /g	ISO 307, 1157, 1628
Indicative density (PE only)	-	kg/m <sup>3</sup>	ISO 1872-1
Luminous transmittance	-	%	ISO 13468-1, -2

**Rheological calculation properties**

Density of melt	-	kg/m <sup>3</sup>	
Thermal conductivity of melt	-	W/(m K)	
Spec. heat capacity of melt	-	J/(kg K)	
Eff. thermal diffusivity	-	m <sup>2</sup> /s	
Ejection temperature	-	°C	

**Test specimen production**

Processing conditions acc. ISO	-	-	ISO....-2
Injection Molding, melt temperature	-	°C	ISO 294
Injection Molding, mold temperature	-	°C	ISO 10724
injection velocity	-	mm/s	ISO 294
pressure at hold	-	MPa	ISO 294
Compression Molding, molding temperature	-	°C	ISO 293
cooling rate	-	K/min	ISO 293
molding time	-	min	ISO 293
demolding temperature	-	°C	ISO 293

**Characteristic**