

SABIC® 3720E

SABIC® PPcompound 3720E is a mineral filled modified polypropylene. Material properties include an excellent stiffness and impact ratio with a low emission and fogging behaviour. Typical applications include non esthetical automotive interior parts. SABIC® PPcompound 3720E is a designated automotive grade. IMDS ID: 96146063
Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	1.04 g/cc	0.0376 lb/in ³	Injection molded sample ISO527-1A; ISO 1183
Filler Content	20 %	20 %	SABIC method
Linear Mold Shrinkage	0.011 cm/cm	0.011 in/in	Injection molded plaque 65x65x3.2mm; SABIC method
Melt Flow	18 g/10 min @Load 2.16 kg, Temperature 230 °C	18 g/10 min @Load 4.76 lb, Temperature 446 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	71	71	ISO 868
Tensile Strength at Break	25.0 MPa	3630 psi	ISO 527/1A
Tensile Strength, Yield	28.0 MPa	4060 psi	ISO 527/1A
Elongation at Break	45 %	45 %	ISO 527/1A
Tensile Modulus	2.00 GPa	290 ksi	ISO 527/1A
Flexural Modulus	2.20 GPa	319 ksi	ISO 178/1A
Izod Impact, Notched (ISO)	6.00 kJ/m ²	2.86 ft-lb/in ²	N.B.: No Break; ISO 180/1A
	3.00 kJ/m ² @Temperature -20.0 °C	1.43 ft-lb/in ² @Temperature -4.00 °F	N.B.: No Break; ISO 180/1A
	3.50 kJ/m ² @Temperature 0.000 °C	1.67 ft-lb/in ² @Temperature 32.0 °F	N.B.: No Break; ISO 180/1A
Charpy Impact Unnotched	1.80 J/cm ²	8.57 ft-lb/in ²	ISO 179/1eU
Charpy Impact, Notched	0.600 J/cm ²	2.86 ft-lb/in ²	ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear	80.0 µm/m-°C @Temperature -30.0 - 30.0 °C	44.4 µin/in-°F @Temperature -22.0 - 86.0 °F	ASTM D696
	95.0 µm/m-°C @Temperature -30.0 - 100 °C	52.8 µin/in-°F @Temperature -22.0 - 212 °F	ISO 11359-2
	110 µm/m-°C @Temperature 23.0 - 80.0 °C	61.1 µin/in-°F @Temperature 73.4 - 176 °F	ASTM D696
Deflection Temperature at 0.46 MPa (66 psi)	110 °C	230 °F	ISO 75
Vicat Softening Point	145 °C	293 °F	at 10 N (VST/A); ISO 306/A