

SABIC® 9712

SABIC® PPcompound 9712 is a mineral filled, impact modified polypropylene TPO. This material combines high impact resistance, scratch resistance, and heat stability with interior automotive UV stability. This material can exhibit ductility at temperatures as low as -30 degrees C. IMDS ID: 164207488

Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	1.03 g/cc	0.0372 lb/in ³	Injection molded sample ISO527-1A; ISO 1183
Filler Content	15 %	15 %	SABIC method
Linear Mold Shrinkage	0.0043 cm/cm	0.0043 in/in	Injection molded plaque 65x65x3.2mm; SABIC method

Melt Flow	14 g/10 min @Load 2.16 kg, Temperature 230 °C	14 g/10 min @Load 4.76 lb, Temperature 446 °F	ISO 1133
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Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	15.0 MPa	2180 psi	ISO 527/1A
Tensile Strength, Yield	22.0 MPa	3190 psi	ISO 527/1A
Elongation at Break	65 %	65 %	ISO 527/1A
Tensile Modulus	1.86 GPa	270 ksi	ISO 527/1A
Flexural Modulus	2.10 GPa	305 ksi	ISO 178/1A

Izod Impact, Notched (ISO)	32.0 kJ/m ²	15.2 ft-lb/in ²	N.B.: No Break; ISO 180/1A
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	4.00 kJ/m ² @Temperature -20.0 °C	1.90 ft-lb/in ² @Temperature -4.00 °F	N.B.: No Break; ISO 180/1A
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	18.0 kJ/m ² @Temperature 0.000 °C	8.57 ft-lb/in ² @Temperature 32.0 °F	N.B.: No Break; ISO 180/1A
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Thermal Properties	Metric	English	Comments
CTE, linear	58.0 µm/m-°C @Temperature -30.0 - 100 °C	32.2 µin/in-°F @Temperature -22.0 - 212 °F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	103 °C	217 °F	ISO 75
Deflection Temperature at 1.8 MPa (264 psi)	56.0 °C	133 °F	ISO 75