

SABIC® 9120

SABIC® PPcompound 9120 is an elastomer-modified mineral filled Polypropylene with excellent impact and stiffness ratio. Typical material applications are esthetical automotive interior parts. It has a very high scratch resistance, no stickiness and a high flow. SABIC® PPcompound 9120 is a designated automotive grade. IMDS ID: 115845433

Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.990 g/cc	0.0358 lb/in ³	Injection molded sample ISO527-1A; ISO 1183
Filler Content	15 %	15 %	SABIC method
Linear Mold Shrinkage	0.0085 cm/cm	0.0085 in/in	Injection molded plaque 65x65x3.2mm; SABIC method

Melt Flow	21 g/10 min @Load 2.16 kg, Temperature 230 °C	21 g/10 min @Load 4.76 lb, Temperature 446 °F	ISO 1133
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Mechanical Properties	Metric	English	Comments
Hardness, Shore D	65	65	ISO 868
Tensile Strength at Break	12.0 MPa	1740 psi	ISO 527/1A
Tensile Strength, Yield	21.0 MPa	3050 psi	ISO 527/1A
Elongation at Break	40 %	40 %	ISO 527/1A
Tensile Modulus	1.70 GPa	247 ksi	ISO 527/1A
Flexural Modulus	1.65 GPa	239 ksi	ISO 178/1A
Izod Impact, Notched (ISO)	20.0 kJ/m ²	9.52 ft-lb/in ²	N.B.: No Break; ISO 180/1A
	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
	7.00 kJ/m ² @Temperature 0.000 °C	3.33 ft-lb/in ² @Temperature 32.0 °F	N.B.: No Break; ISO 180/1A
Charpy Impact, Notched	2.00 J/cm ²	9.52 ft-lb/in ²	ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear	65.0 µm/m·°C @Temperature -30.0 - 30.0 °C	36.1 µin/in·°F @Temperature -22.0 - 86.0 °F	ASTM D696
	80.0 µm/m·°C @Temperature -30.0 - 100 °C	44.4 µin/in·°F @Temperature -22.0 - 212 °F	ISO 11359-2
	95.0 µm/m·°C @Temperature 23.0 - 80.0 °C	52.8 µin/in·°F @Temperature 73.4 - 176 °F	ASTM D696
Deflection Temperature at 0.46 MPa (66 psi)	110 °C	230 °F	ISO 75