

SABIC® 15T1020

SABIC® PPcompound 15T1020 is a 20% talc-filled polypropylene homopolymer. The material's high modulus and good thermal stabilization makes it suited for applications under the bonnet such as heating, ventilation and air conditioning housings. SABIC® PPcompound 15T1020 is a designated automotive grade. IMDS ID: 16486973
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	0.012 cm/cm	0.012 in/in	Injection molded plaque 65x65x3.2mm; SABIC method

Melt Flow	7.0 g/10 min @Load 2.16 kg, Temperature 230 °C	7.0 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	29.0 MPa	4210 psi	ISO 527/1A
Tensile Strength, Yield	37.0 MPa	5370 psi	ISO 527/1A
Elongation at Break	50 %	50 %	ISO 527/1A
Tensile Modulus	2.60 GPa	377 ksi	ISO 527/1A
Flexural Modulus	2.70 GPa	392 ksi	ISO 178/1A

Izod Impact, Notched (ISO)	3.40 kJ/m ²	1.62 ft-lb/in ²	N.B.: No Break; ISO 180/1A
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	2.20 kJ/m ² @Temperature -20.0 °C	1.05 ft-lb/in ² @Temperature -4.00 °F	N.B.: No Break; ISO 180/1A
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	2.70 kJ/m ² @Temperature 0.000 °C	1.28 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	50.0 µm/m-°C @Temperature -30.0 - 30.0 °C	27.8 µin/in-°F @Temperature -22.0 - 86.0 °F	ASTM D696
	75.0 µm/m-°C @Temperature -30.0 - 100 °C	41.7 µin/in-°F @Temperature -22.0 - 212 °F	ISO 11359-2
	100 µm/m-°C @Temperature 23.0 - 80.0 °C	55.6 µin/in-°F @Temperature 73.4 - 176 °F	ASTM D696

Deflection Temperature at 0.46 MPa (66 psi)	120 °C	248 °F	ISO 75
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