

SABIC® 8620

SABIC® PPcompound 8620 is a mineral filled, impact modified polypropylene TPO. This material combines scratch resistance and good flow with exterior automotive weathering stability. It was originally designed for painted or unpainted automotive bumper fascia applications where a combination of high stiffness and cold temperature ductility is required. IMDS ID: 209747700
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	18 %	18 %	SABIC method
Linear Mold Shrinkage	0.0070 cm/cm	0.0070 in/in	Injection molded plaque 65x65x3.2mm; SABIC method
Melt Flow	23 g/10 min @Load 2.16 kg, Temperature 230 °C	23 g/10 min @Load 4.76 lb, Temperature 446 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	11.0 MPa	1600 psi	ISO 527/1A
Tensile Strength, Yield	17.0 MPa	2470 psi	ISO 527/1A
Elongation at Break	39 %	39 %	ISO 527/1A
Tensile Modulus	1.68 GPa	244 ksi	ISO 527/1A
Flexural Modulus	1.74 GPa	252 ksi	ISO 178/1A
Izod Impact, Notched (ISO)	49.0 kJ/m ²	23.3 ft-lb/in ²	N.B.: No Break; ISO 180/1A
	6.00 kJ/m ² @Temperature -20.0 °C	2.86 ft-lb/in ² @Temperature -4.00 °F	N.B.: No Break; ISO 180/1A
	25.0 kJ/m ² @Temperature 0.000 °C	11.9 ft-lb/in ² @Temperature 32.0 °F	N.B.: No Break; ISO 180/1A

Thermal Properties	Metric	English	Comments
CTE, linear	41.0 µm/m-°C @Temperature -30.0 - 100 °C	22.8 µin/in-°F @Temperature -22.0 - 212 °F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	100 °C	212 °F	ISO 75
Deflection Temperature at 1.8 MPa (264 psi)	56.0 °C	133 °F	ISO 75