

# SABIC® 8620A

SABIC® PPcompound 8620A is a mineral filled, impact modified polypropylene TPO. It was originally designed for painted automotive bumper fascia applications where a combination of good flow, high stiffness, and cold temperature ductility is required.  
IMDS ID: 209747752

Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	1.03 g/cc	0.0372 lb/in <sup>3</sup>	Injection molded sample ISO527-1A; ISO 1183

Linear Mold Shrinkage	0.0070 cm/cm	0.0070 in/in	Injection molded plaque 65x65x3.2mm; SABIC method
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Melt Flow	12 g/10 min @Load 2.16 kg, Temperature 230 °C	12 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	13.0 MPa	1890 psi	ISO 527/1A
Tensile Strength, Yield	17.0 MPa	2470 psi	ISO 527/1A
Elongation at Break	41 %	41 %	ISO 527/1A
Tensile Modulus	1.66 GPa	241 ksi	ISO 527/1A
Flexural Modulus	1.78 GPa	258 ksi	ISO 178/1A

Izod Impact, Notched (ISO)	47.0 kJ/m <sup>2</sup>	22.4 ft-lb/in <sup>2</sup>	N.B.: No Break; ISO 180/1A
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	6.00 kJ/m <sup>2</sup> @Temperature -20.0 °C	2.86 ft-lb/in <sup>2</sup> @Temperature -4.00 °F	N.B.: No Break; ISO 180/1A
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	31.0 kJ/m <sup>2</sup> @Temperature 0.000 °C	14.8 ft-lb/in <sup>2</sup> @Temperature 32.0 °F	N.B.: No Break; ISO 180/1A
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Thermal Properties	Metric	English	Comments
CTE, linear	32.0 µm/m-°C @Temperature -30.0 - 100 °C	17.8 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
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Deflection Temperature at 1.8 MPa (264 psi)	56.0 °C	133 °F	ISO 75
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