

SABIC® PPcompound 8620

PP

Saudi Basic Industries Corporation (SABIC)

Product Texts

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

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	23	g/10min	ISO 1133
Temperature	230	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	1680	MPa	ISO 527
Yield stress	17	MPa	ISO 527
Yield strain	4.4	%	ISO 527
Stress at break	11	MPa	ISO 527
Strain at break	39	%	ISO 527
Flexural modulus, 23°C	1740	MPa	ISO 178
Charpy notched impact strength, +23°C	58	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	7	kJ/m ²	ISO 179/1eA
Izod notched impact strength	6	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	1900	MPa	ASTM D 638
Tensile Strength at Yield	17	MPa	ASTM D 638
Tensile Strength at Break	12	MPa	ASTM D 638
Elongation at Yield	5	%	ASTM D 638
Elongation at Break	101	%	ASTM D 638
Flexural Modulus	1380	MPa	ASTM D 790
Shore D Hardness	54	-	ASTM D 2240

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	56	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	100	°C	ISO 75-1/-2
Vicat softening temperature, A	123	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	98	°C	ASTM D 648
DTUL @ 264 psi	52	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1030	kg/m ³	ISO 1183
Density	1030	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 100	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	210 - 270	°C	-
Mold temperature	15 - 60	°C	-
Zone 1	190 - 230	°C	-
Zone 2	200 - 250	°C	-
Zone 3	210 - 270	°C	-
Nozzle temperature	210 - 270	°C	-
Back pressure	1 - 1.5	MPa	-

Characteristics

Special Characteristics

High impact or impact modified