

SABIC® PPcompound 9712

PP

Saudi Basic Industries Corporation (SABIC)

Product Texts

SABIC® PPcompound 9712 is a mineral filled, impact modified polypropylene TPO. This material combines high impact resistance, scratch resistance, and heat stability with interior automotive UV stability. This material can exhibit ductility at temperatures as low as -30 degrees C. IMDS ID: 164207488

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	14	g/10min	ISO 1133
Temperature	230	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	1860	MPa	ISO 527
Yield stress	22	MPa	ISO 527
Yield strain	5	%	ISO 527
Stress at break	15	MPa	ISO 527
Strain at break	>50	%	ISO 527
Flexural modulus, 23°C	2100	MPa	ISO 178
Charpy notched impact strength, +23°C	34	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	3	kJ/m ²	ISO 179/1eA
Izod notched impact strength	4	kJ/m ²	ISO 180/1A

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	103	°C	ISO 75-1/-2
Vicat softening temperature, A	136	°C	ISO 306

Other properties	Value	Unit	Test Standard
Density	1030	kg/m ³	ISO 1183
Density	1040	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, U.V. stabilized or stable to weather, Heat stabilized or stable to heat