

SABIC® PP COMPOUND 9712

PP COMPOUND MINERAL FILLED IMPACT MODIFIED
REGION AMERICAS

DESCRIPTION

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

TYPICAL PROPERTY VALUES

Revision 20230421

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 50 mm/min	22	MPa	ISO 527
Tensile Stress, break, 50 mm/min, 1A	15	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5	%	ISO 527
Tensile Strain, break, 50 mm/min	65	%	ISO 527
Tensile Modulus, 1 mm/min	1860	MPa	ISO 527
Flexural Modulus, 2 mm/min, 64mm span	2100	MPa	ISO 178
IMPACT			
Instrumented Impact Energy @ peak, 23°C @ 6.6 m/s	19	J	ASTM D3763
Instrumented Impact Energy @ peak, -30°C @ 6.6 m/s	22	J	ASTM D3763
Izod Impact, notched, 23°C, 80*10*4mm, Cut	32	kJ/m ²	ISO 180/1A
Izod Impact, notched, -30°C, 80*10*4mm, Cut	4	kJ/m ²	ISO 180/1A
Charpy Impact, notched, 23°C, 80*10*4mm, Cut	34	kJ/m ²	ISO 179/1eA
Charpy Impact, notched, -30°C, 80*10*4mm, Cut	3	kJ/m ²	ISO 179/1eA
THERMAL			
CLTE, -30C to 100°C, flow	58	µm/mK	ISO 11359-2
CLTE, -30C to 100°C, xflow	150	µm/mK	ISO 11359-2
Vicat Softening 10N, 50°C/hr	136	°C	ISO 306
HDT 0.45 MPa, 80*10*4mm, Cut	103	°C	ISO 75-1&2
HDT 1.8 MPa, 80*10*4mm, Cut	58	°C	ISO 75-1&2
PHYSICAL			
Mold Shrinkage, 48 hrs @ 23°C, flow	0.8	%	SABIC method
Specific Gravity	1.04	-	ASTM D792
Density	1.03	g/cm ³	ISO 1183
Melt Flow Rate, 230°C/2.16 kg	14	g/10 min	ISO 1133
INJECTION MOLDING			
Drying Temperature	80 – 100	°C	
Drying Time	2 – 4	Hrs	
Melt Temperature	210 – 270	°C	
Nozzle Temperature	210 – 270	°C	
Front - Zone 3 Temperature	210 – 270	°C	
Middle - Zone 2 Temperature	200 – 250	°C	
Rear - Zone 1 Temperature	190 – 230	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Temperature	15 – 60	°C	
Back Pressure	1 – 1.5	MPa	

STORAGE AND HANDLING

Avoid prolonged storage in open sunlight, high temperatures (<50 °C) and/or high humidity as this could well speed up alteration and consequently loss of quality of the material and/or its packaging. Keep material completely dry for good processing.

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