

SABIC® PPCOMPOUND 5521

PP COMPOUND MINERAL FILLED IMPACT MODIFIED
REGION AMERICAS

DESCRIPTION

SABIC® PPcompound 5521 is a mineral filled, impact modified polypropylene TPO. This material combines good flow with exterior automotive weathering stability. The general purpose black color product is offered without weathering stability for good paintability. The weatherable product was originally designed for unpainted automotive exterior bumper cap and step pad applications where high flexibility is required.

IMDS ID: 163257209

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 50 mm/min	18	MPa	ISO 527
Tensile Stress, break, 50 mm/min, 1A	13	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5.5	%	ISO 527
Tensile Strain, break, 50 mm/min	160	%	ISO 527
Tensile Modulus, 1 mm/min	850	MPa	ISO 527
Flexural Modulus, 2 mm/min, 64mm span	890	MPa	ISO 178
Hardness, Shore D	57	-	ISO 868
IMPACT			
Instrumented Impact Energy @ peak, 23°C @ 2.2 m/s	17	J	ASTM D3763
Instrumented Impact Energy @ peak, -30°C @ 2.2 m/s	23	J	ASTM D3763
Izod Impact, notched, 23°C, 80*10*4mm, Cut	49	kJ/m²	ISO 180/1A
Izod Impact, notched, 0°C, 80*10*4mm, Cut	11	kJ/m²	ISO 180/1A
Izod Impact, notched, -30°C, 80*10*4mm, Cut	9	kJ/m²	ISO 180/1A
Charpy Impact, notched, 23°C, 80*10*4mm, Cut	59	kJ/m²	ISO 179/1eA
Charpy Impact, notched, 0°C, 80*10*4mm, Cut	11	kJ/m²	ISO 179/1eA
Charpy Impact, notched, -30°C, 80*10*4mm, Cut	7	kJ/m²	ISO 179/1eA
THERMAL			
CLTE, -30C to 100°C, flow	129	µm/mK	ISO 11359-2
CLTE, -30C to 100°C, xflow	148	µm/mK	ISO 11359-2
Vicat Softening 10N, 50°C/hr	136	°C	ISO 306
HDT 0.45 MPa, 80*10*4mm, Cut	86	°C	ISO 75-1&2
HDT 1.8 MPa, 80*10*4mm, Cut	51	°C	ISO 75-1&2
PHYSICAL			
Specific Gravity	0.9	-	ASTM D792
Density	0.9	g/cm³	ISO 1183
Melt Flow Rate, 230°C/2.16 kg	19	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	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Front - Zone 3 Temperature	210 – 270	°C	
Middle - Zone 2 Temperature	200 – 250	°C	
Rear - Zone 1 Temperature	190 – 230	°C	
Mold Temperature	15 – 60	°C	
Back Pressure	1 – 1.5	MPa	

