

SABIC® PPcompound 5521

Polypropylene

SABIC Innovative Plastics

Message:

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. The IMDS is 163257209.

General Information			
Filler / Reinforcement	Mineral		
Additive	Impact Modifier		
Features	Good Flexibility		
	Good Flow		
	Good Weather Resistance		
	Impact Modified		
	Paintable		
Uses	Automotive Applications		
	Automotive Exterior Parts		
Appearance	Black		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.900	g/cm ³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	19	g/10 min	ISO 1133
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	57		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	853	MPa	ISO 527-2/1
Tensile Stress			
Yield	18.0	MPa	ISO 527-2/50
Break	13.7	MPa	ISO 527-2/1A/50
Tensile Strain			ISO 527-2/50
Yield	5.5	%	
Break	160	%	
Flexural Modulus ¹ (64.0 mm Span)	897	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C ²	7.2	kJ/m ²	
0°C ³	12	kJ/m ²	

23°C ⁴	59	kJ/m ²	
Notched Izod Impact Strength ⁵		ISO 180/1A	
-30°C	9.5	kJ/m ²	
0°C	12	kJ/m ²	
23°C	50	kJ/m ²	
Instrumented Dart Impact ⁶		ASTM D3763	
-30°C, Energy at Peak Load	23.7	J	
23°C, Energy at Peak Load	17.4	J	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature ⁷			
0.45 MPa, Unannealed	86.4	°C	ISO 75-2/B
1.8 MPa, Unannealed	51.8	°C	ISO 75-2/A
Vicat Softening Temperature	136	°C	ISO 306/A50
Coefficient of Linear Thermal Expansion		ISO 11359-2	
Flow : -30 to 100°C	130	µm/Mk	
Transverse : -30 to 100°C	148	µm/Mk	
Injection	Nominal Value	Unit	
Drying Temperature	80.0 to 100	°C	
Drying Time	2.0 to 4.0	hr	
Rear Temperature	190 to 230	°C	
Middle Temperature	200 to 250	°C	
Front Temperature	210 to 270	°C	
Nozzle Temperature	210 to 270	°C	
Processing (Melt) Temp	210 to 270	°C	
Mold Temperature	15.0 to 60.0	°C	
Back Pressure	1.00 to 1.50	MPa	
NOTE			
1.	2.0 mm/min		
2.	80*10*4mm, Cut		
3.	80*10*4 mm, Cut		
4.	80*10*4 mm, Cut		
5.	80*10*4mm, Cut		
6.	2.20 m/sec		
7.	80*10*4mm, Cut		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

