+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

SABIC® PPCOMPOUND G3230A

PP SHORT GLASS FIBER REINFORCED
REGION AMERICAS

DESCRIPTION

SABIC® PPcompound G3230A is a 30% short glass fiber reinforced Polypropylene for under-the-hood and structural applications. The base material is a PP homopolymer and is available in standard black. The glass fibres are chemically coupled to the PP matrix. This material has been designed to combine a good performance profile with fast processing.

SABIC® PPcompound G3230A is a designated automotive grade.

IMDS ID: 109612410

TYPICAL PROPERTY VALUES

Revision 20210721

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 50 mm/min	83	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	2.7	%	ASTM D638
Tensile Modulus, 50 mm/min	6580	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	5120	MPa	ASTM D790
Tensile Stress, break, 50 mm/min, 1A	85	MPa	ISO 527
Tensile Strain, break, 50 mm/min	3.3	%	ISO 527
Tensile Modulus, 1 mm/min	6500	MPa	ISO 527
Flexural Modulus, 2 mm/min, 64mm span	6600	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C, 63.5*12.7*3.2mm, Cut	568	J/m	ASTM D4812
Izod Impact, notched, 23°C, 63.5*12.7*3.2mm, Cut	81	J/m	ASTM D256
Instrumented Impact Energy @ peak, 23°C @ 2.2 m/s	7	J	ASTM D3763
Izod Impact, notched, 23°C, 80*10*4mm, Cut	10	kJ/m²	ISO 180/1A
Izod Impact, notched, -30°C, 80*10*4mm, Cut	10	kJ/m²	ISO 180/1A
Charpy Impact, notched, 23°C, 80*10*4mm, Cut	10	kJ/m²	ISO 179/1eA
Charpy Impact, notched, -30°C, 80*10*4mm, Cut	11	kJ/m²	ISO 179/1eA
THERMAL			
HDT, 0.45 MPa, 3.2 mm	159	°C	ASTM D648
HDT, 1.82 MPa, 3.2 mm	150	°C	ASTM D648
CLTE, -30C to 100°C, flow	5	µm/mK	ISO 11359-2
CLTE, -30C to 100°C, xflow	160	µm/mK	ISO 11359-2
Vicat Softening 10N, 50°C/hr	164	°C	ISO 306
HDT 0.45 MPa, 80*10*4mm, Cut	160	°C	ISO 75-1&2
HDT 1.8 MPa, 80*10*4mm, Cut	150	°C	ISO 75-1&2
PHYSICAL			
Specific Gravity	1.12	-	ASTM D792
Mold Shrinkage, 48 hrs @ 23°C, flow	0.4	%	SABIC method
Mold Shrinkage, 48 hrs @ 23°C, xflow	0.7	%	SABIC method
Density	1.12	g/cm³	ISO 1183
Melt Flow Rate, 230°C/2.16 kg	12	g/10 min	ISO 1133

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	
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.

DISCLAIMER