

SABIC® PPCOMPOUND 1920

PP COMPOUND MINERAL FILLED
REGION AMERICAS

DESCRIPTION

SABIC® PPcompound 1920 is an FDA compliant, talc filled, heat stabilized homopolymer polypropylene compound. This compound exhibits high flow and is suitable for injection molding applications.

IMDS ID: 482238095

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	36	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	29	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	20.5	%	ASTM D638
Tensile Modulus, 50 mm/min	2970	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	2490	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	36	MPa	ISO 527
Tensile Stress, break, 50 mm/min, 1A	32	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.5	%	ISO 527
Tensile Strain, break, 50 mm/min	10.6	%	ISO 527
Tensile Modulus, 1 mm/min	3200	MPa	ISO 527
Flexural Modulus, 2 mm/min, 64mm span	3170	MPa	ISO 178
Hardness, Shore D	74	-	ISO 868
IMPACT			
Izod Impact, unnotched, 23°C, 63.5*12.7*3.2mm, Cut	410	J/m	ASTM D4812
Izod Impact, notched, 23°C, 63.5*12.7*3.2mm, Cut	21	J/m	ASTM D256
Instrumented Impact Energy @ peak, 23°C @ 2.2 m/s	3	J	ASTM D3763
Izod Impact, notched, 23°C, 80*10*4mm, Cut	2	kJ/m²	ISO 180/1A
Izod Impact, notched, -30°C, 80*10*4mm, Cut	1	kJ/m²	ISO 180/1A
Charpy Impact, notched, 23°C, 80*10*4mm, Cut	2	kJ/m²	ISO 179/1eA
Charpy Impact, notched, -30°C, 80*10*4mm, Cut	1	kJ/m²	ISO 179/1eA
THERMAL			
HDT, 0.45 MPa, 3.2 mm	129	°C	ASTM D648
HDT, 1.82 MPa, 3.2 mm	73	°C	ASTM D648
CLTE, -30C to 100°C, flow	58	µm/mK	ISO 11359-2
CLTE, -30C to 100°C, xflow	115	µm/mK	ISO 11359-2
Vicat Softening 10N, 50°C/hr	157	°C	ISO 306
HDT 0.45 MPa, 80*10*4mm, Cut	128	°C	ISO 75-1&2
HDT 1.8 MPa, 80*10*4mm, Cut	73	°C	ISO 75-1&2
PHYSICAL			
Specific Gravity	1.05	-	ASTM D792
Mold Shrinkage, 48 hrs @ 23°C, flow	0.95	%	SABIC method



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, 48 hrs @ 23°C, xflow	1.25	%	SABIC method
Density	1.05	g/cm ³	ISO 1183
Melt Flow Rate, 230°C/2.16 kg	18	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	
Mold Temperature	15 – 60	°C	
Back Pressure	1 – 1.5	MPa	

