SABIC® PPCOMPOUND 19T1040

PP COMPOUND MINERAL FILLED
REGION AMERICAS

DESCRIPTION

SABIC® PPcompound 19T1040 is a 40% talc-filled polypropylene homopolymer. The material's high fill grade makes for a very high stiffness. This combined with the high flow and good thermal stabilization makes it especially suited for complex injection molded applications requiring a very high modulus and high thermal stability.

SABIC® PPcompound 19T1040 is a designated automotive grade.

IMDS ID: 16488039

TYPICAL PROPERTY VALUES

Revision 20211206

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	32	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	28	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	3	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	6.7	%	ASTM D638
Tensile Modulus, 50 mm/min	3990	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	3600	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	30	MPa	ISO 527
Tensile Stress, break, 50 mm/min, 1A	24	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	2.3	%	ISO 527
Tensile Strain, break, 50 mm/min	11	%	ISO 527
Tensile Modulus, 1 mm/min	5330	MPa	ISO 527
Flexural Modulus, 2 mm/min, 64mm span	5170	MPa	ISO 178
Hardness, Shore D	75	-	ISO 868
IMPACT			
Izod Impact, unnotched, 23°C, 63.5*12.7*3.2mm, Cut	202	J/m	ASTM D4812
Izod Impact, notched, 23°C, 63.5*12.7*3.2mm, Cut	3	J/m	ASTM D256
Instrumented Impact Energy @ peak, 23°C @ 2.2 m/s	4	J	ASTM D3763
Izod Impact, notched, 23°C, 80*10*4mm, Cut	2	kJ/m²	ISO 180/1A
Izod Impact, notched, 0°C, 80*10*4mm, Cut	1	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	3	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	134	°C	ASTM D648
HDT, 1.82 MPa, 3.2 mm	78	°C	ASTM D648
CLTE, -30C to 100°C, flow	48	µm/mK	ISO 11359-2
CLTE, -30C to 100°C, xflow	101	µm/mK	ISO 11359-2
Vicat Softening 10N, 50°C/hr	150	°C	ISO 306
HDT 0.45 MPa, 80*10*4mm, Cut	130	°C	ISO 75-1&2
HDT 1.8 MPa, 80*10*4mm, Cut	89	°C	ISO 75-1&2

CHEMISTRY THAT MATTERS™

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Specific Gravity	1.26	-	ASTM D792
Density	1.25	g/cm³	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	

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

CHEMISTRY THAT MATTERS™