



# 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/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched, 0°C, 80*10*4mm, Cut	1	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched, -30°C, 80*10*4mm, Cut	1	kJ/m <sup>2</sup>	ISO 180/1A
Charpy Impact, notched, 23°C, 80*10*4mm, Cut	3	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact, notched, -30°C, 80*10*4mm, Cut	1	kJ/m <sup>2</sup>	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



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Specific Gravity	1.26	-	ASTM D792
Density	1.25	g/cm <sup>3</sup>	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

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

