



# SABIC® PPCOMPOUND 7705

PP COMPOUND MINERAL FILLED IMPACT MODIFIED  
REGION AMERICAS

## DESCRIPTION

SABIC® PPcompound 7705 is a mineral filled modified polypropylene. This material combines high scratch resistance, high stiffness, good impact and high flow. This material has a very broad processing window combined with good esthetical performance. Typical applications include esthetical automotive interior parts such as instrument panels, lower and upper dashboard, door panels and trim.

SABIC® PPcompound 7705 is a designated automotive grade.

IMDS ID: 16161010

## TYPICAL PROPERTY VALUES

Revision 20211207

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	23	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	16	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	4.6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	24	%	ASTM D638
Tensile Modulus, 50 mm/min	1900	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	1900	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	22	MPa	ISO 527
Tensile Stress, break, 50 mm/min, 1A	17	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.4	%	ISO 527
Tensile Strain, break, 50 mm/min	32	%	ISO 527
Tensile Modulus, 1 mm/min	2010	MPa	ISO 527
Flexural Modulus, 2 mm/min, 64mm span	2070	MPa	ISO 178
Hardness, Shore D	60	-	ISO 868
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C, 63.5*12.7*3.2mm, Cut	NB	J/m	ASTM D4812
Izod Impact, notched, 23°C, 63.5*12.7*3.2mm, Cut	118	J/m	ASTM D256
Instrumented Impact Energy @ peak, 23°C @ 6.6 m/s	22	J	ASTM D3763
Instrumented Impact Energy @ peak, 0°C @ 6.6 m/s	19	J	ASTM D3763
Instrumented Impact Energy @ peak, -30°C @ 6.6 m/s	7	J	ASTM D3763
Izod Impact, notched, 23°C, 80*10*4mm, Cut	20	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched, 0°C, 80*10*4mm, Cut	6	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched, -30°C, 80*10*4mm, Cut	3	kJ/m <sup>2</sup>	ISO 180/1A
Charpy Impact, notched, 23°C, 80*10*4mm, Cut	NB	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact, notched, -30°C, 80*10*4mm, Cut	2	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm	112	°C	ASTM D648
HDT, 1.82 MPa, 3.2 mm	57	°C	ASTM D648
CLTE, -30°C to 100°C, flow	59	µm/mK	ISO 11359-2
CLTE, -30°C to 100°C, xflow	148	µm/mK	ISO 11359-2
Vicat Softening 10N, 50°C/hr	130	°C	ISO 306

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT 0.45 MPa, 80*10*4mm, Cut	105	°C	ISO 75-1&2
HDT 1.8 MPa, 80*10*4mm, Cut	59	°C	ISO 75-1&2
<b>PHYSICAL</b>			
Specific Gravity	1.05	-	ASTM D792
Density	1.04	g/cm <sup>3</sup>	ISO 1183
Melt Flow Rate, 230°C/2.16 kg	22	g/10 min	ISO 1133
<b>INJECTION MOLDING</b>			
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 NON-INFRINGEMENT 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.