

# SABIC® PPCOMPOUND 7450

REGION AMERICAS

## DESCRIPTION

SABIC® PPcompound 7450 is a mineral filled, impact modified polypropylene TPO. This material can exhibit high impact resistance and good paintability in automotive exterior applications.

IMDS ID: 87784390

## TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	15	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	13	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	9	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	300	%	ASTM D 638
Tensile Modulus, 50 mm/min	1120	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	1100	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	18	MPa	ISO 527
Tensile Stress, break, 50 mm/min, 1A	13	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.1	%	ISO 527
Tensile Strain, break, 50 mm/min	150	%	ISO 527
Tensile Modulus, 1 mm/min	1360	MPa	ISO 527
Flexural Modulus, 2 mm/min, 64mm span	1400	MPa	ISO 178
Hardness, Shore D	61	-	ISO 868
IMPACT			
Izod Impact, unnotched, 23°C, 63.5*12.7*3.2mm, Cut	982	J/m	ASTM D 4812
Izod Impact, notched, 23°C, 63.5*12.7*3.2mm, Cut	447	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C @ 2.2 m/s	14	J	ASTM D 3763
Instrumented Impact Energy @ peak, -30°C @ 2.2 m/s	20	J	ASTM D 3763
Izod Impact, notched, 23°C, 80*10*4mm, Cut	NB	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched, 0°C, 80*10*4mm, Cut	NB	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched, -30°C, 80*10*4mm, Cut	5	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	4	kJ/m <sup>2</sup>	ISO 179/1eA



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm	79	°C	ASTM D 648
HDT, 1.82 MPa, 3.2 mm	49	°C	ASTM D 648
Vicat Softening 10N, 50°C/hr	120	°C	ISO 306
HDT 0.45 MPa, 80*10*4mm, Cut	90	°C	ISO 75-1&2
HDT 1.8 MPa, 80*10*4mm, Cut	57	°C	ISO 75-1&2
<b>PHYSICAL</b>			
Specific Gravity	0.97	-	ASTM D 792
Mold Shrinkage, 48 hrs @ 23°C, flow	0.69	%	SABIC method
Mold Shrinkage, 48 hrs @ 23°C, xflow	1	%	SABIC method
Mold Shrinkage, 1 hr @ 80°C, flow	0.74	%	SABIC method
Mold Shrinkage, 1 hr @ 80°C, xflow	1.15	%	SABIC method
Density	0.97	g/cm <sup>3</sup>	ISO 1183
Melt Flow Rate, 230°C/2.16 kg	21	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	

## QUALITY

SABIC Europe is fully certified in accordance with the internationally accepted quality standard ISO9001.

## 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

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.



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