

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 ²	ISO 180/1A
Izod Impact, notched, 0°C, 80*10*4mm, Cut	NB	kJ/m ²	ISO 180/1A
Izod Impact, notched, -30°C, 80*10*4mm, Cut	5	kJ/m ²	ISO 180/1A
Charpy Impact, notched, 23°C, 80*10*4mm, Cut	NB	kJ/m ²	ISO 179/1eA
Charpy Impact, notched, -30°C, 80*10*4mm, Cut	4	kJ/m ²	ISO 179/1eA



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL			
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
PHYSICAL			
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 ³	ISO 1183
Melt Flow Rate, 230°C/2.16 kg	21	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	

