

SABIC® PPCOMPOUND 7985

PP COMPOUND MINERAL FILLED IMPACT MODIFIED
REGION AMERICAS

DESCRIPTION

SABIC® PPcompound 7985 is a mineral filled, impact modified polypropylene TPO. This material combines scratch resistance and heat stability with interior automotive UV stability.

IMDS ID: 209747565

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	27	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	20	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	22	%	ASTM D638
Tensile Modulus, 50 mm/min	2780	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	1940	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	27	MPa	ISO 527
Tensile Stress, break, 50 mm/min, 1A	20	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	14	%	ISO 527
Tensile Modulus, 1 mm/min	2190	MPa	ISO 527
Flexural Modulus, 2 mm/min, 64mm span	2220	MPa	ISO 178
Hardness, Shore D	66	-	ISO 868
IMPACT			
Izod Impact, unnotched, 23°C, 63.5*12.7*3.2mm, Cut	1080	J/m	ASTM D4812
Izod Impact, notched, 23°C, 63.5*12.7*3.2mm, Cut	45	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	7	J	ASTM D3763
Instrumented Impact Energy @ peak, -30°C @ 6.6 m/s	2	J	ASTM D3763
Izod Impact, notched, 23°C, 80*10*4mm, Cut	4	kJ/m ²	ISO 180/1A
Izod Impact, notched, 0°C, 80*10*4mm, Cut	2	kJ/m ²	ISO 180/1A
Izod Impact, notched, -30°C, 80*10*4mm, Cut	2	kJ/m ²	ISO 180/1A
Charpy Impact, notched, 23°C, 80*10*4mm, Cut	6	kJ/m ²	ISO 179/1eA
Charpy Impact, notched, 0°C, 80*10*4mm, Cut	2	kJ/m ²	ISO 179/1eA
Charpy Impact, notched, -30°C, 80*10*4mm, Cut	2	kJ/m ²	ISO 179/1eA
THERMAL			
HDT, 0.45 MPa, 3.2 mm	114	°C	ASTM D648
HDT, 1.82 MPa, 3.2 mm	60	°C	ASTM D648
CLTE, -30C to 100°C, flow	7	µm/mK	ISO 11359-2
CLTE, -30C to 100°C, xflow	18	µm/mK	ISO 11359-2
Vicat Softening 10N, 50°C/hr	144	°C	ISO 306
HDT 0.45 MPa, 80*10*4mm, Cut	108	°C	ISO 75-1&2



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT 1.8 MPa, 80°10*4mm, Cut	61	°C	ISO 75-1&2
PHYSICAL			
Specific Gravity	1.02	-	ASTM D792
Mold Shrinkage, 48 hrs @ 23°C, flow	0.8	%	SABIC method
Mold Shrinkage, 48 hrs @ 23°C, xflow	1.2	%	SABIC method
Mold Shrinkage, 1 hr @ 80°C, flow	1	%	SABIC method
Mold Shrinkage, 1 hr @ 80°C, xflow	1.4	%	SABIC method
Density	1.02	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	

