

## ParsaFlex 48307D-Mantra

Compounded Polyolefin

### Description

ParsaFlex 48307D-Mantra is a mineral filled high crystalline polypropylene with good flow characteristics. It provides good stiffness/impact balance, good scratch resistance and low odor. The grade also is UV stabilized and demonstrates high resistance to stress whitening. It has been particularly designed for injection molding of automotive interior parts and trims namely instrument panels and consoles. The grade is available in color-matched, pellet form.

### Characteristics

**Material Status:** Commercial: Active

**Filler/Reinforcement:** Mineral Filler , 20% by weight

**Appearance:** Color-Matched

**Form:** Pellets

**Processing Method:** Injection molding

### Applications

Automotive applications, interior parts, instrument panels and consoles

### Properties

Physical	Value	Unit	Test Method
Density	1.05	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage		%	ASTM D955
Across Flow	1.05 - 1.15		
Flow	1.05 - 1.15		
Melt Flow Rate (MFR) (230°C/2.16 kg)	14 - 16	g/10min	ASTM D1238
Flammability	HB	-	UL 94
Mechanical	Value	Unit	Test Method
Tensile Modulus (50 mm/min)	1600	MPa	ASTM D638
Tensile Stress (50 mm/min)		MPa	ASTM D638
Yield	20		

Break	16		
Tensile Strain (50 mm/min)		%	ASTM D638
Yield	9		
Break	> 100		
Flexural Modulus	1700	MPa	ASTM D790
Flexural Stress @ Yield	NA	MPa	ASTM D790
Flexural Strain @ Yield	NA	%	ASTM D790
Charpy Notched Impact Strength		kJ/m <sup>2</sup>	ASTM D6110
@ 23 °C	16		
@ 0 °C	6.0		
@ -20 °C	3.4		
Charpy Unnotched Impact Strength		kJ/m <sup>2</sup>	ASTM D6110
@ 23 °C	No Break		
Izod Notched Impact Strength		kJ/m <sup>2</sup>	ASTM D256
@ 23 °C	15		
@ 0 °C	5.5		
@ -20 °C	3.2		
Scratch Resistance (2N)	130	MPa	ASTM G171-03
Hardness (Shore D)	63		ASTM D2240
<b>Thermal</b>	<b>Value</b>	<b>Unit</b>	<b>Test Method</b>
Heat Deflection Temperature		°C	ASTM D648
1.82 MPa, Unannealed	53		
0.455 MPa, Unannealed	108		
Vicat Softening Temperature	NA	°C	ASTM D1525
<b>Processing Conditions</b>			
Drying Temperature	80 °C		
Drying Time	2h		
Barrel Temperature	190 - 230 °C		
Melt Temperature	210 - 240 °C		
Mould Temperature	30 - 50 °C		
Injection Speed	Low to medium		
Hold Pressure	30 - 60 MPa		

**Notes:**

*Typical properties: these are not to be construed as specifications.*