

ParsaFill 25204

Mineral Filled Polypropylene

Description

ParsaFill 25204 is a 20 wt.% mineral filled polypropylene. Addition of filler provides dimensional stability, stiffness, hardness and reduced creep compared to base material. It provides reasonable flow characteristics for most injection molded parts.

Characteristics

Material Status: Commercial: Active

Filler/Reinforcement: Mineral Filler , 20% by weight

Appearance: Natural

Form: Pellets

Processing Method: Injection molding

Applications

Automotive applications, Garden furniture, Electro-installation boxes

Properties

Physical	Value	Unit	Test Method
Density	1.05	g/cm ³	ASTM D792
Molding Shrinkage		%	ASTM D955
Across Flow	0.9 - 1.3		
Flow	0.9 - 1.3		
Melt Flow Rate (MFR) (230°C/2.16 kg)	14 - 18	g/10min	ASTM D1238
Flammability	HB	-	UL 94
Mechanical	Value	Unit	Test Method
Tensile Modulus (50 mm/min)	2000 - 2200	MPa	ASTM D638
Tensile Stress (50 mm/min)		MPa	ASTM D638
Yield	25 - 27		
Break	20		

Tensile Strain (50 mm/min)		%	ASTM D638
Yield	5		
Break	35		
Flexural Modulus	2400	MPa	ASTM D790
Flexural Stress @ Yield	30	MPa	ASTM D790
Flexural Strain @ Yield	NA	%	ASTM D790
Charpy Notched Impact Strength		kJ/m ²	ASTM D6110
@ 23 °C	7		
@ 0 °C	NA		
@ -20 °C	NA		
Charpy Unnotched Impact Strength		kJ/m ²	ASTM D6110
@ 23 °C	No Break		
Izod Notched Impact Strength		kJ/m ²	ASTM D256
@ 23 °C	74		
@ 0 °C	NA		
@ -20 °C	NA		
Scratch Resistance (2N)	NA	MPa	ASTM G171-03
Hardness (Shore D)	69		ASTM D2240
Thermal	Value	Unit	Test Method
Heat Deflection Temperature		°C	ASTM D648
1.82 MPa, Unannealed	58		
0.455 MPa, Unannealed	NA		
Vicat Softening Temperature	NA	°C	ASTM D1525
Processing Conditions			
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.