

ParsaNano 63115

Polypropylene-based Nanocomposite

Description

ParsaNano 63115 is polypropylene based nanocomposite which is designed to fulfill the customers' demands of elastic modulus, tensile strength, impact resistance and paint adhesion. The product is suitable for injection molding of automotive exterior trims, especially paintable parts, e.g. wheel cap.

Characteristics

Material Status: Commercial: Active

Filler/Reinforcement: Mineral Filler , 5% by weight

Appearance: Color-Matched

Form: Pellets

Processing Method: Injection molding

Applications

Automotive exterior trims, especially wheel cap; Household applications

Properties

Physical	Value	Unit	Test Method
Density	0.94	g/cm ³	ASTM D792
Molding Shrinkage		%	ASTM D955
Across Flow	1.2 - 1.4		
Flow			
Melt Flow Rate (MFR) (230°C/2.16 kg)	10	g/10min	ASTM D1238
Flammability	HB	-	UL 94
Mechanical	Value	Unit	Test Method
Tensile Modulus (50 mm/min)	1800	MPa	ASTM D638
Tensile Stress (50 mm/min)		MPa	ASTM D638
Yield	33		
Break	25		

Tensile Strain (50 mm/min)		%	ASTM D638
Yield	11		
Break	40		
Flexural Modulus	NA	MPa	ASTM D790
Flexural Stress @ Yield	NA	MPa	ASTM D790
Flexural Strain @ Yield	NA	%	ASTM D790
Charpy Notched Impact Strength		kJ/m ²	ASTM D6110
@ 23 °C	9		
@ 0 °C	NA		
@ -20 °C	NA		
Charpy Unnotched Impact Strength		kJ/m ²	ASTM D6110
@ 23 °C	No Break		
Izod Notched Impact Strength	NA	J/m	ASTM D256
Scratch Resistance (2N)	NA	MPa	ASTM G171-03
Hardness (Shore D, 15 sec, 23°C)	75		ASTM D2240
Thermal	Value	Unit	Test Method
Heat Deflection Temperature		°C	ASTM D648
1.82 MPa, Unannealed	NA		
0.455 MPa, Unannealed	130		
Vicat Softening Temperature	NA	°C	ASTM D1525

Notes:

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