TotalEnergies

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Polypropylene 4252

Technical Data Sheet
Polypropylene – Impact Copolymer
Produced in the United States

Description

Polypropylene 4252 is a 1.5 melt flow rate impact copolymer designed for improved toughness and high melt strength. This resin offers outstanding processability in combination with excellent mechanical properties. 4252 was specifically developed for the extruded corrugated sheet market.

High Purity: Polypropylene 4252 allows for extended processing runs without screen pack pluggage.

FDA: 4252 complies with all applicable FDA regulations for food contact applications.

Applications: 4252 is recommended for corrugated sheet, profile extrusion, blow molding, thermoforming, and slit film for carpet backing applications.

Processing: 4252 processes on conventional extrusion equipment with typical melt temperatures of 400°F-500°F (204°C-260°C).

Characteristics

	Method	Unit	Typical Value
Rheological Properties			
Melt Flow	D-1238	g/10 min	1.5
Mechanical Properties(1)			
Tensile Strength at Yield	D-638	psi (MPa)	4,000 (28)
Elongation at Yield	D-638	%	6.5
Flexural Modulus	D-790	psi (MPa)	180,000 (1,240)
Izod Impact Notched @ 23°C	D-256A	ft-lb/in (J/m)	No Break
Thermal Properties(1)			
Melting Point	DSC(2)	°F (°C)	320-329 (160-165)
Heat Deflection	D-648	°F (°C)	203 (95)
Other Physical Properties			
Density	D-1505	g/cm^3	0.905

(1) Data developed under laboratory conditions and are not to be used as specification, maxima or minima.
(2) MP determined with a DSC-2 Differential Scanning Calorimeter. Test procedure available upon request.

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