



**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:** Low catalyst residues in Polypropylene 4252 allow 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     |
|--------------------------------------------|--------------|-------------------|-------------------|
| <b>Rheological Properties</b>              |              |                   |                   |
| Melt Flow                                  | D-1238       | g/10 min          | 1.5               |
| <b>Mechanical Properties<sup>(1)</sup></b> |              |                   |                   |
| 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.-lbs/in. (J/m) | No Break          |
| <b>Thermal Properties<sup>(1)</sup></b>    |              |                   |                   |
| Melting Point                              | TOTAL Method | °F (°C)           | 320-329 (160-165) |
| Heat Deflection                            | D-648        | °F (°C)           | 203 (95)          |
| <b>Other Physical Properties</b>           |              |                   |                   |
| Density                                    | D-1505       | g/cm <sup>3</sup> | 0.905             |

(1) Data developed under laboratory conditions and are not to be used as specification, maxima or minima.

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All tests were run under laboratory conditions. ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of TotalEnergies products must be guided by the users own methods for selection of proper formulation. TotalEnergies Petrochemicals & Refining USA Inc. disclaims any responsibility for misuse or misapplication of its products. TotalEnergies MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TotalEnergies' liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited at customer option to replacement of non-performing goods or payment not to exceed the purchase price plus transportation charges thereon in respect to any material which damage is claimed.

Polypropylene

