

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Description

Polypropylene Lumicene® M3661 is an isotactic form of homopolymer polypropylene made via TotalEnergies' proprietary metallocene catalyst technology.

Applications: Lumicene® M3661 is a medium molecular weight material recommended for cast film extrusion. However, due to its unique and interesting properties, other applications may exist.

Processing: Lumicene® M3661 is a lower crystallinity, narrower molecular weight distribution product than conventional polypropylene. Cast films produced from M3661 exhibit outstanding optical properties and toughness compared to standard materials.

Characteristics

| | Method | Unit | Typical Value |
|--------------------------------------------|----------|--------------|---------------|
| Rheological Properties | | | |
| Melt Flow | D-1238 | g/10 min | 14 |
| Physical Properties⁽¹⁾ | | | |
| Tensile Strength @ Break | D-882, A | psi (MD/TD) | 5,800 / 5,500 |
| Elongation at Break | D-882, A | % (MD/TD) | 720 / 810 |
| 1% Secant Modulus | D-882, A | kpsi (MD/TD) | 81 / 82 |
| Haze | D-1003 | % | 0.4 |
| Gloss, 45° | D-2457 | - | 81 |
| Thermal Properties⁽²⁾⁽³⁾ | | | |
| Melting Point | DSC | °F (°C) | 302 (150) |
| Other Physical Properties | | | |
| Density | D-1505 | g/cc | 0.9 |

(1) Non-oriented film – 2 mils (50 microns)

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

(3) MP determined with a DSC-2 Differential Scanning Calorimeter. Test procedure available upon request