

Technical Data Sheet Metallocene Polypropylene – Homopolymer Produced in the United States

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

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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 Refining USA Inc. disclaims any responsibility for misuse or misapplication of its products. TotalEnergies MCRSNTY OP MERCHANTHARDILTY AND THERE IS NO WARRANTY THAT GOODS SUPPUIED SHALL BE FIT FOR ANY PARTICULAR PUPOSE. TotalEnergies Mathieve exclusive remedy for any claims 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.