



TotalEnergies

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Polypropylene 7450HC

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

Description

Polypropylene 7450HC Low catalyst results in improved color stability.

Clarity/Impact: 7450HC improves its clarity and impact resistance over conventional homopolymer films.

Heat Sealable: 7450HC makes it suitable as a heat seal layer for oriented films.

Slip/Antiblock: 7450HC is formulated with a high level of antiblock additive for improved film handling.

FDA: 7450HC complies with all applicable FDA regulations for food contact applications.

Applications: 7450HC is recommended for use in either non-oriented cast film processes for manufacture of packaging films that require improved optical and impact properties, or as a heat seal layer for oriented films.

Processing: 7450HC resin processes on film extrusion equipment with typical melt temperatures of 450°F-525°F (232°C-274°C).

Characteristics

	Method	Unit	Typical Value
Rheological Properties			
Melt Flow	D-1238	g/10 min	5.0
Film Properties, Non-Oriented⁽¹⁾			
Ultimate Tensile	D-882	psi (MPa)	4,000 (28)
1% Secant Modulus	D-882	psi (MPa)	80,000 (550)
Elongation at Break	D-882	%	400
MVTR @ 100°F, 90% RH	E-96	g/100 sq-in/24 hrs/mil	0.7
Dart Impact (F50)	D-1709	g/mil	45
Haze	D-1003	%	3
Gloss, 45°	D-2457	%	80
Heat Seal Temperature	F-88 ⁽³⁾	°F (°C)	270 (132)
Thermal Properties⁽¹⁾⁽²⁾			
Melting Point	DSC	°F (°C)	289 (143)
Other Physical Properties			
Density	D-1505	g/cc	0.90

- (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.
- (3) Minimum seal strength is 200 g/inch at 15 psi pressure and 1 sec.

Rev: Sept 2021

TOTALENERGIES PETROCHEMICALS & REFINING USA, INC.
POLYMERS AMERICAS
1201 Louisiana Street
Suite 1800
Houston, TX 77002
www.polymers.totalenergies.com

TECHNICAL CENTER
P.O. Box 1200
Deer Park, Texas 77536
Phone: 281-884-7500

1-800-344-3462

Polypropylene



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.

