

Petrothene

NA420

Low Density Polyethylene

Film Extrusion Grade

Melt Index: 2.5 Vinyl Acetate Content: 2.5%

lyondellbasell

Applications

Petrothene NA420 is a series of LDPE/EVA copolymer resins selected by customers for high impact and clarity packaging film.

Regulatory Status

The base resin NA420 meets the requirements of the Food and Drug Administration regulation 21 CFR 177.1350. This regulation allows the use of this ethylene vinyl acetate copolymer "...in articles or components of articles intended for use in contact with food..." Specific limitations or conditions of use may apply. Contact your Equistar product safety representative for more information.

Processing Techniques

Recommended extrusion conditions are 330° - 380°F (166° - 194°C) melt temperatures and a blow-up ratio between 1.7-3.0:1. Specific recommendations for the processing of NA420 can be made only when the end use application, required properties and the processing equipment are known.

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index	2.5	g/10 min	D1238
Vinyl Acetate Content	2.5	%	
Base Resin Density	0.924	g/cc	D1505
Vicat Softening Point	90	°C	D1525
Film*			
Haze ¹	4.5	%	D1003
Gloss, 45° ¹	73		D2457
Tensile Strength @ Break, MD (TD)	3,300 (2,400)	psi	D882
Elongation @ Break, MD (TD)	350 (550)	%	D882
1% Secant Modulus, MD (TD)	20,000 (25,000)	psi	D882
Dart Drop Impact Strength, F ₅₀	80	g	D1709
Elmendorf Tear Strength, MD (TD)	220 (250)	g	D1922
Product	NA420000	NA420013X01	NA420234
Slip (ppm)	None	None	None
Antiblock (ppm)	None	None	3,000

* Data obtained from film produced on a 3½" (89 mm) blown film line, commercially available 8" (203 mm) die, 375°F (191°C) melt extrusion temperature, 2:1 BUR, 1.25 mil (32 micron) gauge, 0.025" die gap at 130 lb/hr.

¹ Optical properties are given for NA420127 (medium slip, medium antiblock).

These are typical values not to be construed as specification limits.

See Page 2 for Additional Information

*Petrothene***NA420**

Low Density Polyethylene

Film Extrusion Grade

Melt Index: 2.5 Vinyl Acetate Content: 2.5%

lyondellbasell

LyondellBasell markets this product through the following entities:

Equistar Chemicals, LP
Basell Sales & Marketing Company B.V.
Basell Asia Pacific Limited
Basell International Trading FZE
LyondellBasell Australia Pty Ltd

Petrothene is a trademark owned or used by the LyondellBasell family of companies. *Petrothene* is registered in the U.S. Patent and Trademark Office.

Before using a product sold by a company of the LyondellBasell family of companies, users should make their own independent determination that the product is suitable for the intended use and can be used safely and legally. SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTY) OTHER THAN AS SEPARATELY AGREED TO BY THE PARTIES IN A CONTRACT.

This product(s) may not be used in:

(i) any U.S. FDA Class I, Health Canada Class I, and/or European Union Class I Medical Devices, without prior notification to Seller for each specific product and application; or

(ii) the manufacture of any of the following, without prior written approval by Seller for each specific product and application: (1) U.S. FDA Class II, Health Canada Class II or Class III, and/or European Union Class II Medical Devices; (2) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned Medical Devices; (3) packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration; (4) tobacco related products and applications; (5) electronic cigarettes and similar devices; and (6) pressure pipe or fittings that are considered a part or component of a nuclear reactor.

(iii) Additionally, the product(s) may not be used in: (1) U.S. FDA Class III, Health Canada Class IV, and/or European Class III Medical Devices; (2) applications involving permanent implantation into the body; (3) life-sustaining medical applications; and (4) lead, asbestos or MTBE related applications.

All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.

Users should review the applicable Material Safety Data Sheet before handling the product.

Equistar Chemicals, LP
1221 McKinney Street, Suite 300
Houston, Texas 77010
(888) 777-0232
www.lyondellbasell.com

© LyondellBasell Industries Holdings, B.V. 2015

8839/0215