



Petrothene®
NA480
Low Density Polyethylene
Film Extrusion Grade
Melt Index 0.25 Vinyl Acetate Content 4.5%

Applications

PETROTHENE NA480 is a series of low density/EVA copolymer resins designed for specialty films. NA480 produces film with superior puncture resistance, impact strength, heat sealability, clarity and low temperature flexibility. Applications include ice bags, frozen food packaging, bundling and heavy-duty bags.

Regulatory Status

The basic resin NA480 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 sales representative for more information regarding the suitability of specific products for specific applications.

Processing Techniques

NA480 has been designed to provide excellent processability over a wide range of extrusion conditions. However, optimum properties are produced at melt temperatures of 330°-430°F (166°-221°C) with a blow-up ratio between 1.7-4.0:1. Drawdown to 1.25 mils is not uncommon at commercial rates when proper extrusion equipment and techniques are used. Specific recommendations for processing NA 480 can be made only when the end use application, required properties and the processing equipment are known. For exact recommendations, please contact your Equistar sales representative.

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index	0.25	g/10 min	D 1238
Vinyl Acetate Incorporated	4.5	%	
Density	0.923	g/cc	D 1505
Vicat Softening Point	88	°C	D 1525
Film*			
Dart Drop Impact Strength, F ₅₀	320	g	D 1709
Tensile Strength, MD (TD)	3,200 (3,000)	psi	D 882
Elongation, MD (TD)	370 (550)	%	D 882
1% Secant Modulus, MD (TD)	19,000 (23,000)	psi	E 111
Elmendorf Tear Strength, MD (TD)	150 (250)	g	D 1922

Products	<u>NA480145</u>	<u>NA480177</u>	<u>NA480178</u>	<u>NA480093</u>
Slip	High	None	None	Low
Antiblock	High	High	High	Medium

These are typical values and not to be construed as specific product limits.

* Data obtained from film produced in a 3½" (89 mm) blown film line, commercially available 8" (203 mm) die, 430°F (221°C) melt extrusion temperature, 2:1 BUR, 2.0 mil [51 micron] gauge, 0.025" die gap at 170 lb/hr

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