

Petrothene<sup>®</sup>

# GA 502

## Linear Low Density Polyethylene Blown/Cast Film Extrusion Grade Melt Index 2.0 Density 0.918

### Applications

The PETROTHENE GA 502 series of resins are pelletized linear low density polyethylenes for applications requiring excellent drawdown and toughness. These pelletized products offer excellent additive homogeneity, require no transfer equipment modifications and facilitate clean and safe storage and handling. They can be used in either blown or cast film extrusion. GA 502-024 is specifically formulated with extra antioxidant for use in cast film. It contains no other additives.

### Processing Techniques

The GA 502 series resins exhibit excellent drawdown characteristics. Recommended conditions are 375°-425°F melt temperature and a 1.5-3.0:1 blow-up ratio. Using proper techniques, these products can readily be drawn below .50 mil at optimum production rates. Specific recommendations for type of resin and extrusion conditions can be made only when the end use, required properties and processing equipment are known. For further suggestions, please contact your Equistar sales representative.

### Regulatory Status

GA 502 series resins meet the requirements of the Food and Drug Administration 21 CFR 177.1520, Subpart C, Item 3.1. This regulation allows the use of this olefin polymer in " ...articles or components or articles intended for use in contact with food." Specific limitations or conditions of use may apply. Contact your Equistar sales representative for more information.

### ASTM Test

Property	Value	Units	Method
Melt Index	2.0	g/10 min	D 1238
Density	0.918	g/cc	D 1505
Film			
Gauge	1.5	mil	
Blow-up Ratio	2.1		
Haze	12	%	D 1003
Gloss, 45°	60		D 523
Dart Drop Impact Strength, F <sub>50</sub>	120	g	D 1709/A
Tensile Strength @ Break, MD (TD)	4,900 (3,600)	psi	D 882
Elongation @ Break, MD (TD)	750 (800)	%	D 882
1% Secant Modulus, MD (TD)	32,000 (36,000)	psi	D 638
Elmendorf Tear, MD (TD)	170 (400)	g	D 1922

Product	GA 502-022	GA 502-023	GA 502-024
Slip	High	Medium	None
Antiblock	High	Medium	None

The information on this document is, to our knowledge, true and accurate. However, since the particular uses and the actual conditions of use of our products are beyond our control, establishing satisfactory performance of our products for the intended application is the customer's sole responsibility. All uses of Equistar products and any written or oral information, suggestions or technical advice from Equistar are without warranty, express or implied, and are not an inducement to use any process or product in conflict with any patent.

Equistar materials are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. Equistar makes no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues or fluids.

More detailed safety and disposal information on our products is contained in the Material Safety Data Sheet (MSDS). All users of our products are urged to retain and use the MSDS. A MSDS is automatically distributed upon purchase/order execution. You may request an advance or replacement copy by calling our MSDS Hotline at (800) 700-0946.

<sup>®</sup> Equistar and Petrothene are registered trademark of Equistar Chemicals, LP.

Equistar Chemicals, LP  
1221 McKinney, Suite 700  
P.O. Box 2583  
Houston, Texas 77252-2583  
(800) 615-8999  
<http://www.equistarchem.com>

5057/0999

**EQUISTAR**  
A Lyondell Company