

Petrothene

GA502

Linear Low Density Polyethylene
Film Extrusion Grade

Melt Index: 2.0 Density: 0.918



Applications

The *Petrothene* GA502 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 modification and facilitate clean and safe storage and handling. They can be used in either blown or cast film extrusion. GA502024 is formulated with higher antioxidant levels for use in cast film.

Regulatory Status

The base resin GA502 meets the requirements of the Food and Drug Administration regulation 21 CFR 177.1520. This regulation allows the use of this olefin polymer 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

The GA502 series resins exhibit excellent drawdown characteristics. Recommended conditions are 375°- 425°F melt temperature and a 1.5-3.0:1 blow-up ratio. Specific recommendations for type of resin and extrusion conditions can be made only when the end use, required properties and processing equipment are known.

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index	2.0	g/10 min	D1238
Density	0.918	g/cc	D1505
Film			
Gauge	1.5	mil	
Blow-up Ratio	2.1		
Haze	12	%	D1003
Gloss, 45°	60		D523
Dart Drop Impact Strength, F ₅₀	120	g	D1709/A
Tensile Strength @ Break, MD (TD)	4,900 (3,600)	psi	D882
Elongation @ Break, MD (TD)	750 (800)	%	D882
1% Secant Modulus, MD (TD)	32,000 (36,000)	psi	D638
Elmendorf Tear, MD (TD)	170 (400)	g	D1922

Product	<u>GA502022</u>	<u>GA502023</u>	<u>GA502024</u>	<u>GA502119X01</u>
Slip (ppm)	1,350	900	None	None
Antiblock (ppm)	7,000	5,500	None	None