

Petrothene®

GA503

Linear Low Density Polyethylene
Film Extrusion Grade
Melt Index 3.5 Density 0.925
Applications

GA503 is a medium density, butene copolymer LLDPE resin with high draw for stiff, thin blown films. GA503 contains an antioxidant package to minimize discoloration and eliminate die build-up.

Regulatory Status

GA503 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.

Processing Techniques

GA503 provides high output at low melt temperatures and without high pressure, high torque or shear-induced melt fracture. For improved drawdown without bubble breaks, GA503 can be blended with LDPE. It can also be blended with high performance LLDPE grades to reduce torque and horsepower requirements. 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.

Typical Properties

Property*	Nominal Value		Units	ASTM Test Method
Melt Index	3.5		g/10 min	D 1238
Density	0.925		g/cc	D 1505
Film Thickness	0.5	1.5	mil	
Haze	25	30	%	D 1003
Gloss	60	25		D 2457
Tensile Strength @ Break, MD (TD)	1,400 (1,050)	4,800 (3,400)	psi	D 882
Elongation @ Break, MD (TD)	500 (630)	690 (740)	%	D 882
1% Secant Modulus, MD (TD)	36,600 (37,000)	44,500 (45,500)	psi	D 882
Elmendorf Tear Strength, MD (TD)	40 (180)	100 (215)	g	D 1922
Dart Drop Impact Strength, F ₅₀ ¹	30	110	g	D 1709

* Testing was performed on film produced at a 2.5:1 BUR, 360°F (182°C) melt temperature, using an 8" die with 0.025" die gap, at 150 lb/hr.

¹ Estimated from TEDD value of 0.3 ft.-lbs. for standard dart and 26" drop height.

Product	GA503027	GA503028
Slip	1,500	800
Antiblock	7,000	1,300
Processing Aid	480	None

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