# Petrothene® GA501023

# Linear Low Density Polyethylene

## LyondellBasell Industries

#### Message:

The Petrothene GA501 series of resins is pelletized liner low density polyethylene selected by customers for film extrusion applications that require excellent drawdown and toughness. These resins have excellent puncture resistance, elongation and heat seal strength. Typical applications include heavy duty shipping sacks, trash can liners, commercial and industrial packaging, as well as food and consumer packaging.

Features Antiblocking   Food Contact Acceptable Good Drawdown   Good Toughness Puncture Resistant   Stip Stip   Vuncture Resistant Stip   Stip Food Packaging   Industrial Applications Liners   Packaging Liners   Packaging Liners   Processing Method Film Extrusion   Physical Nominal Value Unit   Pellets Stip   Physical Nominal Value Math DisS   Methods-Flow Rate (MFR) (190°C/216 Kg) 1.0 g/10 min ASTM D1238   Film Stip g/10 min ASTM D1238   Film Stip g/10 min ASTM D1238   Film Stip g/10 min ASTM D1238   Stap g/10 min ASTM D1238   Film Stap g/10 min ASTM D1238   Film Thickness - Tested <sup>1</sup> 25 m ASTM D1238   Ye Secant, McD1:25 µm, Blown Film 196 MPa MPa	General Information				
Features Antiblocking   Food Contact Acceptable Good Drawdown   Good Toughness Good Toughness   Puncture Resistant Good Toughness   Puncture Resistant Sip   Udes Bags   Food Packaging Industrial Applications   Industrial Applications Liners   Packaging FoA 21 CFR 177.1520   Processing Method Filmestrusion   Processing Method Filmestrusion   Position Nominal Value Qirdm <sup>2</sup> n   Mainel Mass-Flow Rate (MFR) (190°C/2.16 kg) 1.0 graft ASTM D1505   Film Thicknes - Tested <sup>10</sup> 2.5 Good mainel Value Intel Method   1% Secant, MD: 25 µm, Blown Film 166 MPa Intel Method   1% Secant, MD: 25 µm, Blown Film 165 MPa Intel Mass-	Additive	Antiblock (5500 ppm)			
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1% Secant, TD : 25 μm, Blown Film 193 MPa   Tensile Strength ASTM D882   MD : Break, 25 μm,Blown Film 45.5 MPa	Secant Modulus			ASTM D882	
Tensile Strength   ASTM D882     MD : Break, 25 μm,Blown Film   45.5   MPa	1% Secant, MD : 25 µm, Blown Film	186	MPa		
MD : Break, 25 µm,Blown Film 45.5 MPa		193	MPa		
	Tensile Strength			ASTM D882	
TD : Break, 25 µm,Blown Film 32.4 MPa	MD : Break, 25 µm,Blown Film	45.5	MPa		
	TD : Break, 25 µm,Blown Film	32.4	MPa		

Tensile Elongation			ASTM D882
MD : Break, 25 µm,Blown Film	580	%	
TD : Break, 25 µm,Blown Film	730	%	
Dart Drop Impact (25 µm, Blown Film)	100	g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD : 25 µm, Blown Film	130	g	
TD : 25 µm, Blown Film	330	g	
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	107	°C	ASTM D1525
Optical	Nominal Value	Unit	Test Method
Gloss (45°, 25.4 µm, Blown Film)	40		ASTM D2457
Haze (25.4 µm, Blown Film)	20	%	ASTM D1003
Additional Information	Nominal Value		
Blow-up Ratio	2.5:1		
Extrusion	Nominal Value	Unit	
Melt Temperature	204 to 232	°C	
NOTE			
1.	Blow-Up Ratio: 2.5:1		

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