

Technical Data Sheet

Petrothene GA2508G



Linear Low Density Polyethylene

Product Description

Petrothene GA2508 is a series of pelletized linear low density polyethylene resins selected by customers for applications that require an enhanced combination of stiffness, maximum strength and toughness. These products offer excellent additive homogeneity, require no transfer equipment modification, and facilitate clean and safe handling. Typical applications include heavy duty shipping sacks, trash can liners, commercial and industrial packaging, as well as food and consumer packaging. The *Petrothene* GA2508 series offers enhanced film strength, drawdown, toughness and stiffness.

Application	Bags & Pouches; Can Liners; Food Packaging Film; Heavy Duty Shipping Sacks; Liner Film; Retail Carryout Bags; Shrink Film
Market	Flexible Packaging; Rigid Packaging
Processing Method	Blown Film; Sheet and Profile Extrusion

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.8	g/10 min	0.8	g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.925	g/cm ³	0.925	g/cm ³	ASTM D792
Product Density, (23 °C)	0.930	g/cm ³	0.930	g/cm ³	ASTM D792
Film					
Dart Drop Impact Strength, F50	120	g	120	g	ASTM D1709
Tensile Strength at Break					
MD	7800	psi	54	MPa	ASTM D882
TD	6600	psi	46	MPa	ASTM D882
Tensile Elongation at Break					
MD	600	%	600	%	ASTM D882
TD	750	%	750	%	ASTM D882
1% Secant Modulus					
MD	49000	psi	338	MPa	ASTM D882
TD	53000	psi	365	MPa	ASTM D882
Elmendorf Tear Strength					
MD	200	g	200	g	ASTM D1922
TD	620	g	620	g	ASTM D1922
Thermal					
Vicat Softening Temperature	235	°F	113	°C	ASTM D1525
Optical					
Haze	18	%	18	%	ASTM D1003
Gloss, (45°)	45	%	45	%	ASTM D2457



Additive			
Slip	None	None	LYB Method
Antiblock	6750 ppm	6750 ppm	LYB Method
Polymer Processing Aid	Present	Present	LYB Method

Product	Product Density(g/cm ³)	Haze(%)	Gloss(%)	Antiblock (ppm)	Polymer Processing Aid()
GA2508	0.925	10	55	None	None
GA2508G	0.930	18	45	6750	Present

Notes

Film sample used for testing was 1.0 mil gauge, 2.5:1 BUR.

These are typical property values not to be construed as specification limits.

Processing Techniques

Recommended processing conditions for this product are a melt temperature of 400 - 450 °F and a 1.5 to 3.0:1 blow-up ratio.

Using proper techniques, these products can readily be drawn below 0.90 mils at optimum production rates.

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

