



Petrothene®

LP5002

High Density Polyethylene

Blow Molding Grade

Melt Index 0.20 Density 0.946

Applications

The PETROTHENE LP5002 series of polyethylene resins exhibits excellent environmental stress crack resistance and is especially designed for bottles containing aggressive agricultural and household chemicals.

Regulatory Status

The LP5002 base resin meets the requirements of 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 sales representative for more information about the use of specific products for specific applications.

Processing Techniques

Specific recommendations for processing LP5002 can only be made when the processing conditions, equipment and end use are known. For further suggestions, please contact your Equistar sales representative.

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index	0.20	g/10 min	D 1238
Density	0.946	g/cc	D 1505
Tensile Strength @ Yield	3,400	psi	D 638
Elongation @ Break	>800	%	D 638
Flexural Modulus	140,000	psi	D 790
Tensile Impact	245	ft-lb/in	D 1822
Low Temperature Brittleness, F ₅₀	<-76	°C	D 746
Heat Deflection Temperature @ 66 psi	66	°C	D 648
Vicat Softening Point	122	°C	D 1525
Hardness, Shore D	65		D 2240
Environmental Stress Crack Resistance, F ₅₀	>1000	hrs	D 1693 ¹
	>1000	hrs	D 2561

Product	LP500200	LP500210
Antistat	None	High

¹ Condition B, 100% Igepal® CO-630

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