


Petrothene®

LR7810

High Density Polyethylene
Blow Molding Grade
Melt Index 0.20 Density 0.948
Applications

The PETROTHENE LR7810 series of polyethylene resins exhibits excellent environmental stress crack resistance and is especially designed for heavy duty bottles, such as those containing detergent and chemicals.

Regulatory Status

The base resin LR7810 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 sales representative for more information about the use of specific products for specific applications.

Processing Techniques

Specific recommendations for processing LR7810 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	0.948	g/cc	D 1505
Tensile Strength @ Yield	3,700	psi	D 638
Elongation @ Break	>500	%	D 638
Flexural Modulus	155,000	psi	D 790
Tensile Impact	189	ft-lb/in.	D 1822
Low Temperature Brittleness, F ₅₀	<-76	°C	D 746
Heat Deflection Temperature @ 66 psi	74	°C	D 648
Vicat Softening Point	124	°C	D 1525
Hardness, Shore D	67		D 2240
Environmental Stress Crack Resistance, F ₅₀	100	hrs	D 1693 ¹
	>750	hrs	D 2561

Product	LR781001	LR781011
Antistat	None	High

¹ 10% Igepal® CO-630, 50°C

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