

Petrothene

# LP510031

High Density Polyethylene  
Blow Molding and Sheet Extrusion Grade  
Melt Index 11.5 Density 0.950



## Applications

*Petrothene* LP510031 is selected by customers for use in large-part blow molding of durable goods and for deep-draw sheet extrusion / thermoforming applications. LP510031 exhibits excellent impact resistance and excellent environmental stress crack resistance.

## Regulatory Status

LP510031 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. For more information, please contact your Equistar product safety representative.

## Processing Techniques

Specific recommendations for processing LP510031 can only be made when the processing conditions, equipment and end use are known.

## Typical Properties

Property	Value	Units	ASTM Test Method
High Load Melt Index	11.5	g/10 min	D1238
Density	0.950	g/cc	D1505
Tensile Strength @ Yield	3,700	psi	D638
Elongation @ Break	>800	%	D638
Flexural Modulus (1% Secant)	165,000	psi	D790
Tensile Impact	>200	ft-lb/in <sup>2</sup>	D1822
Low Temperature Brittleness, F50	<-76	°C	D746
Vicat Softening Point	122	°C	D1525
Environmental Stress Crack Resistance*, F <sub>50</sub>	>1000	hrs	D1693
Hardness, Shore D	65		D2240

\*100% Igepal® CO-630, 50°C

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