

Technical Data Sheet

Petrothene LB501031

High Density Polyethylene



Product Description

Petrothene LB501031 is selected by customers for its balance of good physical properties with excellent processability in blowmolding operations.

Regulatory Status

For regulatory compliance information, see Petrothene LB501031 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Furniture; General Sheet Extrusion; Sports, Leisure & Toys
Market	Outdoor Equipment
Processing Method	Extrusion Blow Molding; Sheet

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/21.6 kg)	11	g/10 min	11	g/10 min	ASTM D1238
Density, (23 °C)	0.949	g/cm ³	0.949	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	168000	psi	1160	MPa	ASTM D790
Tensile Strength at Break	4900	psi	33.8	MPa	ASTM D638
Tensile Strength at Yield	3650	psi	25.2	MPa	ASTM D638
Tensile Elongation at Yield	1300	%	1300	%	ASTM D638
Impact					
Tensile Impact Strength	249	ft-lb/in ²	523	kJ/m ²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	68		68		ASTM D2240
Thermal					
Vicat Softening Temperature	259	°F	126	°C	ASTM D1525
Low Temperature Brittleness, F ₅₀	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	145	°F	63	°C	ASTM D648

Notes

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

Processing Techniques

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

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Recipient Tracking #:
Request #: 909396

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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- (ii) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices;
- (iii) packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration;
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- (v) safety components in automotive applications, for example: air bags, air bag unit housings and covers, seat belt mechanisms, brake systems, pedals and pedal supports, steering systems.

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- (ii) applications involving permanent implantation into the body;
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