

Technical Data Sheet

Petrothene LR734001

High Density Polyethylene



Product Description

Petrothene LR734001 is a high density polyethylene resin that exhibits good stiffness and environmental stress crack resistance. Typical applications include bottles for household chemicals, food products, and personal care products.

Regulatory Status

For regulatory compliance information, see *Petrothene* LR734001 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Bottles For Consumer Goods
Market	Rigid Packaging
Processing Method	Extrusion Blow Molding
Attribute	Excellent Processability

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.38	g/10 min	0.38	g/10 min	ASTM D1238
Density, (23 °C)	0.953	g/cm ³	0.953	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	176000	psi	1210	MPa	ASTM D790
Tensile Strength at Yield	4000	psi	27.6	MPa	ASTM D638
Tensile Elongation at Break	>500	%	>500	%	ASTM D638
Environmental Stress Crack Resistance, F ₅₀ (100% Igepal®, Cond B)	25	hr	25	hr	ASTM D1693
Impact					
Tensile Impact Strength	131	ft-lb/in ²	275	kJ/m ²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	67		67		ASTM D2240
Thermal					
Vicat Softening Temperature	261	°F	127	°C	ASTM D1525
Low Temperature Brittleness, F ₅₀	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	167	°F	75	°C	ASTM D648

Notes

Igepal® is a registered trademark of Rhodia.

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Recipient Tracking #:
Request #: 907657

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.

Company Information

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

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- (i) U.S. FDA Class I or II Medical Devices; Health Canada Class I, II or III Medical Devices; European Union Class I or II Medical Devices;
- (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;
- (iv) tobacco related products and applications, electronic cigarettes and similar devices.
- (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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- (i) U.S. FDA Class III Medical Devices; Health Canada Class IV Medical Devices; European Class III Medical Devices;
- (ii) applications involving permanent implantation into the body;
- (iii) life-sustaining medical applications.

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