

# 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
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
<b>Physical</b>					
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 <sup>3</sup>	0.953	g/cm <sup>3</sup>	ASTM D1505
<b>Mechanical</b>					
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 <sub>50</sub> (100% Igepal®, Cond B)	25	hr	25	hr	ASTM D1693
<b>Impact</b>					
Tensile Impact Strength	131	ft-lb/in <sup>2</sup>	275	kJ/m <sup>2</sup>	ASTM D1822
<b>Hardness</b>					
Shore Hardness, (Shore D)	67		67		ASTM D2240
<b>Thermal</b>					
Vicat Softening Temperature	261	°F	127	°C	ASTM D1525
Low Temperature Brittleness, F <sub>50</sub>	<-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.

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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