

## Technical Data Sheet

**Petrothene LR734045**

High Density Polyethylene

**Product Description**

*Petrothene LR734045* is a high density polyethylene resin that exhibits good stiffness and environmental stress crack resistance. This product contains stearate as a core rod release for the injection-blow molding process. Typical applications include bottles for household chemicals, food products, and personal care products.

**Regulatory Status**

For regulatory compliance information, see *Petrothene LR734045* [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

<b>Status</b>	Commercial: Active
<b>Availability</b>	North America
<b>Application</b>	Bottles and Vials
<b>Market</b>	Rigid Packaging
<b>Processing Method</b>	Injection Blow Molding
<b>Attribute</b>	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
<b>Additive</b>					
Stearate As core rod release agent	Medium		Medium		LYB Method