

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.

Application	Bottles and Vials
Market	Rigid Packaging
Processing Method	Injection 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
Additive					
Stearate	Medium		Medium		LYB Method
As core rod release agent					

