

Technical Data Sheet

Petrothene LH735100

High Density Polyethylene



Product Description

Petrothene LH735100 exhibits good stiffness and environmental stress crack resistance. Typical applications include bottles for bleach, detergents and household chemicals.

Application Bottles For Consumer Goods; Bottles for Industrial Use

Market Rigid Packaging

Processing Method Extrusion Blow Molding
Attribute Good Processability

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.35	g/10 min	0.35	g/10 min	ASTM D1238
Density, (23 °C)	0.953	g/cm³	0.953	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	180000	psi	1240	MPa	ASTM D790
Tensile Strength at Yield	3900	psi	26.9	MPa	ASTM D638
Tensile Elongation at Break	>500	%	>500	%	ASTM D638
Environmental Stress Crack Resistance, F₅₀ (100% Igepal®, Cond B)	25	hr	25	hr	ASTM D1693
Impact					
Tensile Impact Strength	120	ft-lb/in²	252	kJ/m²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	66		66		ASTM D2240
Thermal					
Vicat Softening Temperature	262	°F	128	°C	ASTM D1525
Low Temperature Brittleness, F₅₀	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	165	°F	74	°C	ASTM D648

Notes

Igepal® is a registered trademark of Rhodia.

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

The product may be sourced from various manufacturing locations which utilize different catalyst systems and undergo unique process conditions

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/.

© LyondellBasell Industries Holdings, B.V. 2018

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.

LyondellBasell Technical Data Sheet Date: 12/6/2024