

## Technical Data Sheet

### *Petrothene* LR732031



High Density Polyethylene

#### Product Description

*Petrothene* LR732031 is a high density polyethylene resin that exhibits an excellent balance of stiffness and environmental stress crack resistance. This resin has excellent extrusion characteristics and melt strength.

#### Regulatory Status

For regulatory compliance information, see *Petrothene* LR732031 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

<b>Status</b>	Commercial: Active
<b>Availability</b>	North America
<b>Application</b>	General Sheet Extrusion
<b>Market</b>	Rigid Packaging
<b>Processing Method</b>	Sheet and Profile Extrusion

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
<b>Physical</b>					
Melt Flow Rate, (190 °C/2.16 kg)	0.30	g/10 min	0.30	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)	181000	psi	1250	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)	30	hr	30	hr	ASTM D1693
<b>Impact</b>					
Tensile Impact Strength	128	ft-lb/in <sup>2</sup>	269	kJ/m <sup>2</sup>	ASTM D1822
<b>Hardness</b>					
Shore Hardness, (Shore D)	67		67		ASTM D2240
<b>Thermal</b>					
Vicat Softening Temperature	259	°F	126	°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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