

## Technical Data Sheet

### *Petrothene* LP510034



High Density Polyethylene

#### Product Description

*Petrothene* LP510034 is selected by customers for use in large-part blow molding of durable goods and for deep-draw sheet extrusion / thermoforming applications. LP510034 exhibits excellent impact resistance and excellent environmental stress crack resistance.

#### Regulatory Status

For regulatory compliance information, see *Petrothene* LP510034 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

<b>Status</b>	Commercial: Active
<b>Availability</b>	North America
<b>Application</b>	Industrial Packaging; Jerry Cans; Structural Parts
<b>Market</b>	Rigid Packaging
<b>Processing Method</b>	Extrusion Blow Molding; Sheet and Profile Extrusion
<b>Attribute</b>	High ESCR (Environmental Stress Cracking Resistance)

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
<b>Physical</b>					
Melt Flow Rate, (190 °C/21.6 kg)	11.5	g/10 min	11.5	g/10 min	ASTM D1238
Density, (23 °C)	0.950	g/cm <sup>3</sup>	0.950	g/cm <sup>3</sup>	ASTM D1505
<b>Mechanical</b>					
Flexural Modulus, (1% Secant)	165000	psi	1140	MPa	ASTM D790
Tensile Strength at Yield	3700	psi	25.5	MPa	ASTM D638
Tensile Elongation at Break	>800	%	>800	%	ASTM D638
Environmental Stress Crack Resistance, F <sub>50</sub> (100% Igepal®, Cond B)	>1000	hr	>1000	hr	ASTM D1693
<b>Impact</b>					
Tensile Impact Strength	>200	ft-lb/in <sup>2</sup>	>420	kJ/m <sup>2</sup>	ASTM D1822
<b>Hardness</b>					
Shore Hardness, (Shore D)	65		65		ASTM D2240
<b>Thermal</b>					
Vicat Softening Temperature	252	°F	122	°C	ASTM D1525
Low Temperature Brittleness, F <sub>50</sub>	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	163	°F	73	°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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