

## Technical Data Sheet

### *Petrothene* LP500210



High Density Polyethylene

#### Product Description

The *Petrothene* LP5002 series of polyethylene resins exhibits excellent environmental stress crack resistance and is selected by customers for use in bottles which contain aggressive agricultural and household chemicals. This product contains synthetic antistat.

#### Regulatory Status

For regulatory compliance information, see *Petrothene* LP500210 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

<b>Status</b>	Commercial
<b>Availability</b>	North America
<b>Application</b>	Bottles For Consumer Goods; Bottles for Industrial Use
<b>Market</b>	Rigid Packaging
<b>Processing Method</b>	Extrusion Blow Molding
<b>Attribute</b>	Contains Antistat; 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/2.16 kg)	0.20	g/10 min	0.20	g/10 min	ASTM D1238
Density, (23 °C)	0.946	g/cm <sup>3</sup>	0.946	g/cm <sup>3</sup>	ASTM D1505
<b>Mechanical</b>					
Flexural Modulus, (1% Secant)	140000	psi	965	MPa	ASTM D790
Tensile Strength at Yield	3400	psi	23.4	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	245	ft-lb/in <sup>2</sup>	515	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)	151	°F	66	°C	ASTM D648
<b>Additive</b>					
Antistat	High		High		LYB Method

Product	Antistat(ppm)
LP500200	None
LP500210	High

## 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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