

## Technical Data Sheet

### *Petrothene* LT543501



High Density Polyethylene

#### Product Description

*Petrothene* LT543501 exhibits an enhanced balance of stiffness and environmental stress crack resistance. Typical applications include bottles for bleach, detergents, household chemicals, foodstuffs and pharmaceuticals.

#### Regulatory Status

For regulatory compliance information, see *Petrothene* LT543501 [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
<b>Market</b>	Rigid Packaging
<b>Processing Method</b>	Extrusion Blow Molding
<b>Attribute</b>	Good Stiffness

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
<b>Physical</b>					
Melt Flow Rate, (190 °C/2.16 kg)	0.35	g/10 min	0.35	g/10 min	ASTM D1238
Density, (23 °C)	0.954	g/cm <sup>3</sup>	0.954	g/cm <sup>3</sup>	ASTM D1505
<b>Mechanical</b>					
Flexural Modulus, (1% Secant)	190400	psi	1310	MPa	ASTM D790
Tensile Strength at Break	2860	psi	19.7	MPa	ASTM D638
Tensile Strength at Yield	4110	psi	28.3	MPa	ASTM D638
Tensile Elongation at Break	1100	%	1100	%	ASTM D638
Environmental Stress Crack Resistance, F <sub>50</sub>	60	hr	60	hr	ASTM D1693
<b>Hardness</b>					
Shore Hardness, (Shore D)	69		69		ASTM D2240
<b>Thermal</b>					
Vicat Softening Point	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)	154	°F	68	°C	ASTM D648

#### Notes

ESCR performed using 100% Igepal® CO-630, 50°C, where; Igepal® is a registered trademark of Rhodia.

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