

# **Technical Data Sheet**

# Petrothene LT523533

High Density Polyethylene



# **Product Description**

*Petrothene* LT523533 exhibits an enhanced balance of stiffness and environmental stress crack resistance. Typical applications include bottles for bleach, detergents, household chemicals, foodstuffs and pharmaceuticals. LT523533 is formulated with a food-grade antistat.

**Application** Bottles For Consumer Goods; Bottles for Industrial Use

Market Rigid Packaging

Processing Method Extrusion Blow Molding

Attribute Contains Antistat; Good ESCR (Environmental Stress Cracking Resistance)

Typical Properties	Nominal Value	English Units	Nominal Value		Test Method
Physical	Value	Onno	Value	Onno	1 OOL WICHIOU
Melt Flow Rate, (190 °C/2.16 kg)	0.35	g/10 min	0.35	g/10 min	ASTM D1238
Density, (23 °C)	0.952	g/cm³	0.952	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	174200	psi	1200	MPa	ASTM D790
Tensile Strength at Break	2830	psi	19.5	MPa	ASTM D638
Tensile Strength at Yield	3900	psi	26.9	MPa	ASTM D638
Tensile Elongation at Break	1100	%	1100	%	ASTM D638
Environmental Stress Crack Resistance, F₅₀	140	hr	140	hr	ASTM D1693
Hardness					
Shore Hardness, (Shore D)	68		68		ASTM D2240
Thermal					
Vicat Softening Point	255	°F	124	°C	ASTM D1525
Low Temperature Brittleness, F₅₀	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	153	°F	67	°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.

### **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 <a href="http://www.lyb.com/">http://www.lyb.com/</a>.

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