Technical Data Sheet

Petrothene LT523502

High Density Polyethylene

Product Description

Petrothene LT523502 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* LT523502 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Bottles For Consumer Goods; Bottles for Industrial Use
Market	Rigid Packaging
Processing Method	Extrusion Blow Molding
Attribute	Good ESCR (Environmental Stress Cracking Resistance)

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
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, F_{50}	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, F_{50}	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	153	°F	67	°C	ASTM D648

Manufacturer website: https://www.lyondellbasell.com/en/

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 http://www.lyb.com/.

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