

Technical Data Sheet

Petrothene LT543502

High Density Polyethylene

LYB LyondellBasell

Product Description

Petrothene LT543502 exhibits an enhanced balance of stiffness and environmental stress crack resistance. Typical applications include bottles for bleach, detergents, household chemicals, foodstuffs and pharmaceuticals.

Application Bottles For Consumer Goods

Market Rigid Packaging

Processing Method Extrusion Blow Molding

Attribute Good Stiffness

T	Nominal	English	Nominal	SI	
Typical Properties	Value	Units	Value	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)	0.954	g/cm³	0.954	g/cm³	ASTM D1505
Mechanical					
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 ₅₀	60	hr	60	hr	ASTM D1693
Hardness					
Shore Hardness, (Shore D)	69		69		ASTM D2240
Thermal					
Vicat Softening Point	259	°F	126	°C	ASTM D1525
Low Temperature Brittleness, F ₅₀	<-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.

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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