Technical Data Sheet

Petrothene LT493701

High Density Polyethylene

Product Description

Petrothene LT493701 exhibits an enhanced balance of stiffness and environmental stress crack resistance. Typical applications include bottles for bleach, detergents, and household chemicals.

Regulatory Status

For regulatory compliance information, see *Petrothene* LT493701 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial
Availability	North America
Application	Bottles For Consumer Goods; Bottles for Industrial Use
Market	Rigid Packaging
Processing Method	Extrusion Blow Molding
Attribute	High 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)	0.34	g/10 min	0.34	g/10 min	ASTM D1238
Density, (23 °C)	0.949	g/cm³	0.949	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	157000	psi	1080	MPa	ASTM D790
Tensile Strength at Yield	3540	psi	24.4	MPa	ASTM D638
Tensile Elongation at Break	1330	%	1330	%	ASTM D638
Environmental Stress Crack Resistance, F_{50}	300	hr	300	hr	ASTM D1693
Impact					
Tensile Impact Strength	134	ft-lb/in²	282	kJ/m²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	63		63		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)	149	°F	65	°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.