Technical Data Sheet

Petrothene LP500200

High Density Polyethylene

Product Description

The *Petrothene* LP5002 series of polyethylene resins exhibits excellent environmental stress crack resistance and is selected by customers for use in bottles which contain aggressive agricultural and household chemicals.

Regulatory Status

For regulatory compliance information, see *Petrothene* LP500200 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	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)	0.20	g/10 min	0.20	g/10 min	ASTM D1238
Density, (23 °C)	0.946	g/cm³	0.946	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	140000	psi	965	MPa	ASTM D790
Tensile Strength at Yield	3400	psi	23.4	MPa	ASTM D638
Tensile Elongation at Break	>800	%	>800	%	ASTM D638
Environmental Stress Crack Resistance, F_{50} (100% Igepal®, Cond B)	>1000	hr	>1000	hr	ASTM D1693
Impact					
Tensile Impact Strength	245	ft-lb/in²	515	kJ/m²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	65		65		ASTM D2240
Thermal					
Vicat Softening Temperature	252	°F	122	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	151	°F	66	°C	ASTM D648
Additive					
Antistat	None		None		LYB Method

Product	Antistat(ppm)
LP500200	None
LP500210	High

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

Notes

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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