Technical Data Sheet

Petrothene LP510034

High Density Polyethylene

Product Description

Petrothene LP510034 is selected by customers for use in large-part blow molding of durable goods and for deep-draw sheet extrusion / thermoforming applications. LP510034 exhibits excellent impact resistance and excellent environmental stress crack resistance.

Regulatory Status

For regulatory compliance information, see *Petrothene* LP510034 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Industrial Packaging; Jerry Cans; Structural Parts
Market	Rigid Packaging
Processing Method	Extrusion Blow Molding; Sheet and Profile Extrusion
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/21.6 kg)	11.5	g/10 min	11.5	g/10 min	ASTM D1238
Density, (23 °C)	0.950	g/cm³	0.950	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	165000	psi	1140	MPa	ASTM D790
Tensile Strength at Yield	3700	psi	25.5	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	>200	ft-lb/in²	>420	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)	163	°F	73	°C	ASTM D648

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.

Certifications

Certified as meeting requirements of NSF International, as stated above.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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