Technical Data Sheet

POLYETHYLENE LP 477-01

High Density Polyethylene

Product Description

LP 477-01 is a high-density polyethylene posessing excellent impact strength for blow molded bleach and detergent bottles, thermoformed industrial parts, tote boxes, trays, liners and pharmaceutical packages.

Regulatory Status

For regulatory compliance information, see POLYETHYLENE LP 477-01 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	Asia-Pacific; Latin America; North America
Processing Method	Blow Molding; Extrusion
Attribute	High Impact Resistance
Forms	Pellets
Application	Bottles; Industrial Applications; Liners; Pharmaceutical Packaging; Tool/Tote Box

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	0.33	g/10 min	ASTM D1238
Density - Specific Gravity	0.953	g/cm³	ASTM D792
Mechanical			
Flexural Modulus, (2% Secant)	1000	MPa	ASTM D790
Tensile Modulus	26.9	MPa	ASTM D638
Tensile Strength at Break	31	MPa	ASTM D638
Tensile Elongation at Break	1000	%	ASTM D638
Tensile Elongation at Yield	7	%	ASTM D638
Hardness			
Shore Hardness, (Shore D)	61		ASTM D2240
Thermal			
Vicat Softening Temperature	129	°C	ASTM D1525
Deflection Temperature Under Load, (0.45 MPa, Unannealed)	73	°C	ASTM D648

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

Notes

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.

Material handling, shelf life & storage

For good processing, we recommend our Product should be stored for no more than 12 months in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage may bring damage to the packaging and product and can negatively affects on the quality of this product and reduce shef life considerably.

Recycling note

This product is based in a thermoplastic resin that is suitable for mechanical recycling, partially or completely. Please, consider the whole construction of the final product using our grade and determine the suitable disposition for recollection, separation and recycling process. The packaging of Lyondellbasell´s products (plastic bags, cardboard boxes and stretch film) are also suitable for mechanical recycling. Any further information needed, contact the ADTS team from Lyondellbasell.

Company Information

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

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