LDPE– Low Density Polyethylene

Facts:

LDPE, Low Density Polyethylene is a tough flexible material which is generally easy to process, over a wide range of conditions and has excellent impact resistance, chemical resistance and insulation properties but has only moderate tensile strength and suffers from creep.

Polyethylene is a member of the polyolefin family, which also includes polypropylene and is one of the most widely used thermoplastic materials in the world today.

PE is susceptible to environmental stress cracking, which can be minimised by reducing internal stresses through proper design and using the lowest MFR material at a particular density level.

Applications:

Pipe couplings, storage, seals, lids, closures, bins and linen baskets.

Limitations:

- High thermal expansion
- Poor weathering resistance
- Subject to stress cracking
- Difficult to bond
- Flammable with poor temperature capacity
- Low strength and stiffness

ExxonMobil LDPE

LD 600BA

Injection Molding Resin

Description

LD 600BA is a high flow LDPE grade, characterized by high stiffness and good toughness.

It's easy processable.

Applications

- rigid medium sized moldings
- domestic houseware
- food containers
- technical parts
- toys
- caps
- bottle closures

Additive Package	Antiblock	Slip	Thermal Stabilizer
LD 600BA	No	No	No

Resin Properties	Test Based On	Typical Value / Unit	
Melt Index	ASTM D 1238	20.5 g/10 min	
Density	ASTM D 4703 / D 1505	0.924 g/cm^3	
Peak Melting Temperature	ExxonMobil Method	109 °C	228 °F
Vicat Softening Point	ISO 306-A50	91 °C	196 °F

Molded Properties			
Tensile Strength at Break	ISO 527-2/1A/50	9 MPa	1300 psi
Elongation at Break	ISO 527-2/1A/50	140 %	
Elastic Modulus (0.05 - 0.25 %)	ISO 527-2/1A/1	190 MPa	27500 psi
Shore Hardness – D (15 sec)	ISO 868	44	

The molded properties have been measured on 4 mm (157.5 mil) thick injection molded specimen, based on ISO 1872-2.

LD 600BA can - in principle - be used in food contact applications in various EU Member States and in the USA (FDA). Migration or use limitations may apply. Please contact your ExxonMobil Chemical representative for more detailed information and/or actual compliance certification documents for the specific grade of interest.

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