

PE - LD

Material Information



PE - LD

Product full identity:

Polyethylene - Low Density

PE - LD offers high impact strength at low temperatures, excellent chemical resistance, and low water absorption. Its flexibility and durability make it ideal for packaging and processing, tank liners, erosion protection, and refrigeration, providing reliable performance for resilient, adaptable projects.

Properties

- High Flexibility
- Wide temperature range (+80 to -50°C)
- High impact strength
- Lightweight and weldable
- Very low moisture absorption <0.1%
- Food contact approved.

Applications

- Packing and processing
- Tank liners
- Erosion control
- Refrigeration

Forms



Sheet

PE - LD

Technical Properties

Physical	Unit	Test Method	Result
Specific gravity	g/cm ³	ASTM 1183	0.94
Water absorption until saturation at 23°C	%	-	-
Maximum service temp. Upper temp limit – short term	°C	-	-
Maximum service temp. Upper temp limit – long term	°C	-	-
Lower temp limit	°C	-	-
Mechanical	Unit	Test Method	Result
Tensile strength	MPa	ISO 527/3	11
Elongation at yield	%	ISO 527/3	>500
Tensile strength at break	MPa	ISO 527/3	28
Unnotched impact strength	kJ/m ²	-	-
Notch impact strength	kJ/m ²	ASTM D4272	42
Ball indentation / Rockwell hardness	MPa	-	-
Shore-D		ISO 868	49
Flexural modulus of elasticity	MPa	-	-
Tensile modulus of elasticity	MPa	ISO 527/3	200
Thermal	Unit	Test Method	Result
Vicat-softening point VST/B/50	°C	ISO 306	93
Heat deflection temperature HDT/B	°C	ISO 78/B	93
Coefficient of linear thermal expansion 23 – 100°C	m/(m.K)	-	-
Thermal conductivity at 23°C	W/mK	-	-
Electrical	Unit	Test Method	Result
Volume resistivity	Ω x m	-	-
Surface resistivity	Ω	-	-
Insulation resistivity	Ω . cm	-	-
Dielectric constant at 1MHz		-	-
Dielectric loss factor at 1MHz		-	-
Dielectric strength	kV/mm	-	-
Comparative tracking index (CTI)		-	-
Additional Data	Unit	Test Method	Result
Bondability		-	-
Food compliance – FDA		FDA	Yes
Food compliance – EU		EU 10/2011	Yes
Antistatic		-	-
Flammability	Unit	Test Method	Result
Fire performance		UL94	HB
Optical	Unit	Test Method	Result
N/A	N/A	N/A	N/A

All information provided in this Product Datasheet is for guide purposes only. The data has been taken from standard test results provided by our manufacturers.