

Linear Low Density Polyethylene

Product Description:

010L22S is a butene commoner based linear low density polyethylene manufactured using Nova Chemicals' Sclairtech Solution Polymerization Technology. This grade combines excellent processability with good strength. It exhibits a controlled morphology and low gel content.

Recommended Applications:

LLDPE 010L22S is recommended mainly for following agricultural drip irrigation application:

Drip lateral pipes for high speed extruders.

This Grade meets the requirements of material as per IS 12786:1989 on "Irrigation equipment - Polyethylene Pipes for irrigation laterals – specification". When incorporated with adequate quantity of carbon black as specified in clause 4.1 of IS 12786:1989, the pipe made from the grade similar to PE-25 for its hydrostatic characteristics (creep rupture stress requirement).

Typical Properties:

Tested Properties	Test Method	UOM	Values*
Resin Properties			
Melt Flow Index (190°C & 2.16Kg)	ASTM D1238	gm/10 min	1.1
Density @ 23°C	ASTM D792	gm/cm ³	0.922
Mechanical Properties			
Tensile Strength @ Yield (Type-IV)	ASTM D638	MPa	13
Tensile Strength @ Break (Type-IV)	ASTM D638	MPa	20
Elongation @ Break (Type-IV)	ASTM D638	%	>600
Notched Izod Impact Strength @ 23°C	ASTM D256	J/m	500
Environmental Properties			
ESCR (10% Igepal), F ₅₀	ASTM D1693B	Hrs	>1000

*Typical values not to be construed as specification limits. Values may change without any prior notice.

* Mechanical Properties tested on compression Molded test specimens.

Recommended Processing Temperature: 180 – 230°C

Packaging Information:

This material is packed and available in raffia bags with net content of 25.0 Kg only. The raffia bags used conforms to the minimum strength requirements of BIS, however, customer shall take due care while handling the bag. Prolonged exposure of these bags to sunlight may deteriorate the bag's performance and cause spillage and wastage. IOCL does not warranty loss of material due to poor material handling practices.

Storage & Handling:

Prevent LLDPE Material from direct exposure to sunlight & heat to avoid quality deterioration. The storage location should be dry, dust free and the storage temperature should not exceed 50°C. Non - compliance to these precautionary measures can lead to degradation of the product causing color changes, odor and inadequate product performance.

Regulatory Information:

LLDPE 010L22S meet "Specification for Polyethylene for safe use in contact with Foodstuff, Pharmaceuticals and Drinking water" as per IS: 10146-1982. It also confirms to the positive list of constituents as per IS: 10141-1982. The grade and Additives incorporated shall meet with FDA: CFR Title21, 177.1520, Olefin Polymers.

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Drip Lateral Pipe