PRODUCT DATA SHEET

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Linear Low Density Polyethylene

HF2910T

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Melt Index: 1.0 g/10min

Density: 0.929 g/cm³

Features
- Hexene copolymer
- Outstanding mechanical properties
- Excellent drawdown
- Good heat sealing range
- Good stiffness

Applications
- General packaging thin film (10µm to 30µm)
- Not recommended for lamination film
- Blending into LDPE

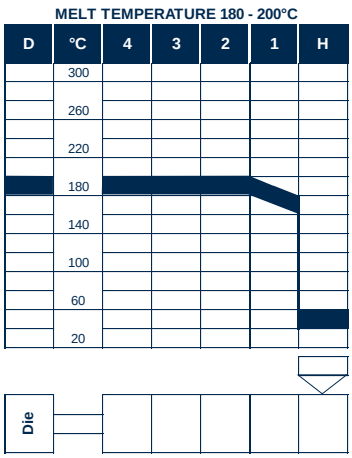
Additives
- Antioxidant
- High antiblock
- High slip
- TNPP free

Typical properties (not to be construed as specifications)		Value (SI)	Value (English)	Method
Resin Properties	Melt Index (190°C/2.16kg)	1.0 g/10min	1.0 g/10min	ASTM D1238
	Nominal density	0.929 g/cm^3	0.929 g/cm^3	ASTM D1505
Film Properties	Tensile strength at yield MD	12 MPa	1740 psi	ASTM D882
	Tensile strength at yield TD	12 MPa	1740 psi	ASTM D882
	Tensile strength at break MD	33 MPa	4786 psi	ASTM D882
	Tensile strength at break TD	23 MPa	3336 psi	ASTM D882
	Elongation MD	499 %	499 %	ASTM D882
	Elongation TD	580 %	580 %	ASTM D882
	Elmendorf Tear MD	8 g/µm	8 g/µm	ASTM D1922
	Elmendorf Tear TD	27 g/µm	27 g/µm	ASTM D1922
	Dart Drop Impact Strength (F_{50})	147 g	147 g	ASTM D1709A
	Haze	15%	15%	ASTM D1003
	Gloss (45°)	45	45	ASTM D2457
	CoF static	0.12	0.12	ASTM D1894
	CoF dynamic	0.12	0.12	ASTM D1894

The above values were measured on a 30 µm film produced on a 75 mm Barmag extruder, using 190°C melt temperature, with a 2.0:1 BUR and a die gap of 3.0 mm.

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Blown film extrusion



Processing

HF2910T should be processed on equipment designed or retrofitted for LLDPE:

- Increased die gap unless a processing aid is incorporated.
- Suitable screw (e.g. Sasol design full length general purpose screw).
- Aerodynamic cooling systems.

Recommended screenpack: 20/40/20 BS mesh.

BUR of greater than 2.0:1 recommended.

Handling

Workers should be protected from the possibility of skin or eye contact with molten polymer. Safety glasses are suggested as a minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapours. Please consult the material safety data sheet (SDS) for more detailed information.

Storage

As ultraviolet light may cause a change in the material, all resins should be protected from direct sunlight during storage. If stored in cool (<25°C), dry area with low ambient light levels, polyolefin resins are expected to maintain their original material and processing properties for at least 12 months.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources. In burning, polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and water mist preferred. In enclosed areas, fire fighters should be provided with self contained breathing apparatus.

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles that are contained in all polyethylene resins. These fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

1. be equipped with adequate filters
2. is operated and maintained in such a manner to ensure no leaks develop
3. that adequate grounding exists at all times

We further recommend that good housekeeping be practised throughout the facility.

Regulatory & Legal Compliance

This material complies with FDA regulation 21 CFR 177.1520 when used unmodified and according to good manufacturing practices for food contact applications. Refer to applicable food contact compliance statement which is available on request.

This material is not medically approved and should therefore not be used in any such application.

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