PRODUCT DATA SHEET

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Linear Low Density Polyethylene

HF2410M

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Melt Index: 1.0 g/10min

Density: 0.924 g/cm³

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

Applications
- General Packaging (30µm to 70µm)
- Blending into LDPE

Additives
- Antioxidant
- Medium antiblock
- Medium slip
- TNPP free

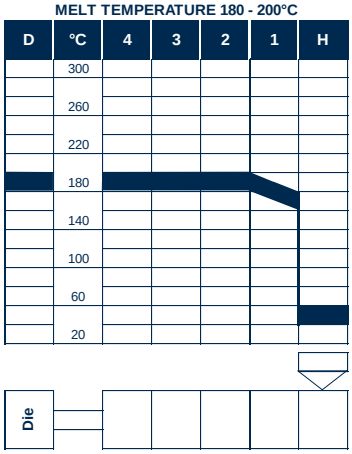
Typical properties (not to be construed as specifications)		Value (SI)	Value (English)	Method
Resin Properties	Melt Index (190°C/2.16kg)	1.0 g/10min	1.0 g/10min	ASTM D1238
	Nominal density	0.920 g/cm^3	0.920 g/cm^3	ASTM D1505
Film Properties	Tensile strength at yield MD	13 MPa	1885 psi	ASTM D882
	Tensile strength at yield TD	11 MPa	1595 psi	ASTM D882
	Tensile strength at break MD	34 MPa	4931 psi	ASTM D882
	Tensile strength at break TD	25 MPa	3626 psi	ASTM D882
	Elongation MD	525 %	525 %	ASTM D882
	Elongation TD	651 %	651 %	ASTM D882
	Elmendorf Tear MD	9 g/µm	9 g/µm	ASTM D1922
	Elmendorf Tear TD	28 g/µm	28 g/µm	ASTM D1922
	Dart Drop Impact Strength (F_{50})	144 g	144 g	ASTM D1709A
	Haze	12%	12%	ASTM D1003
	Gloss (45°)	51	51	ASTM D2457
	Blocking	19 g	19 g	ASTM 3354
	Coefficient of friction (µs)	0.14	0.14	ASTM 1894
	Coefficient of friction (µD)	0.14	0.14	ASTM 1894

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

MELT TEMPERATURE 180 - 200°C



Processing

HF2410M 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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