PRODUCT DATA SHEET

LLDPE LLDPE LLDPE LLDPE LLDPE LLDPE LLDPE LLDPE LLDPE LLDPE

Linear Low Density Polyethylene

HF2308E

Technical support:
Polymer Technology Services Centre
22 Pressburg Road,
Modderfontein, 1645
South Africa

Tel: +27 (0)11 458 0700
Fax: +27 (0)11 458 0734

Sales office:
Sasol Base Chemicals
PO Box 5486
Johannesburg
2000
South Africa

polymers@sasol.com

Date of issue: January 2020

www.sasol.com

Melt Index: 0.8 g/10min

Density: 0.923 g/cm³

Features
- Hexene copolymer
- Outstanding mechanical properties
- Excellent puncture resistance
- High impact strength

Applications
- Heavy duty film (>100 µm)
- Blending into HDPE of LDPE

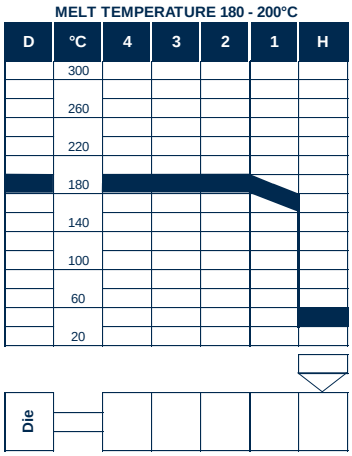
Additives
- Antioxidant
- Low antiblock
- TNPP free

Typical properties (not to be construed as specifications)		Value (SI)	Value (English)	Method
Resin Properties	Melt Index (190°C/2.16kg)	0.8 g/10min	0.8 g/10min	ASTM D1238
	Nominal density	0.923 g/cm³	0.923 g/cm³	ASTM D1505
Film Properties	Tensile strength at yield MD	11 MPa	1595 psi	ASTM D882
	Tensile strength at yield TD	12 MPa	1740 psi	ASTM D882
	Tensile strength at break MD	37 MPa	5510 psi	ASTM D882
	Tensile strength at break TD	41 MPa	5365 psi	ASTM D882
	Elongation MD	725 %	725 %	ASTM D882
	Elongation TD	763 %	763 %	ASTM D882
	Elmendorf Tear MD	18 g/µm	18 g/µm	ASTM D1922
	Elmendorf Tear TD	20 g/µm	20 g/µm	ASTM D1922
	Dart Drop Impact Strength (F_{50})	500 g	500 g	ASTM D1709A

The above values were measured on a 100 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.

LLDPE LLDPE LLDPE LLDPE LLDPE LLDPE LLDPE LLDPE LLDPE LLDPE

Blown film extrusion



Processing

HF2308E 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.

This publication contains information provided in good faith and is indicative, based on Sasol's current knowledge on the subject. No guarantee or warranty is intended or implied. We reserve the right to make changes as a result of technological progress or development. Any information, including suggestions for use of products, should not preclude experimental testing and verification, to ensure the suitability of a product for each specific application. Users must also abide by local and international laws and obtain all necessary permits when required to do so. Prior to handling a hazardous product, consult it's safety data sheet. In case of questions or queries, please contact Sasol through our customer service channels. All products purchased or supplied by Sasol Chemicals are subject to the terms and conditions set out in the contract, order confirmation and/or bill of lading.