

PRODUCT DATA SHEET



LDPE	LDPE	LDPE	LDPE	LDPE	LDPE	LDPE	LDPE	LDPE	LDPE	LDPE
Low Density Polyethylene LF2103X						Technical support: Sasol Chemicals North America LLC 12120 Wickchester Lane Houston, TX 77079 Email: PolymersTechnical@us.sasol.com			Sales office: Sasol Chemicals North America LLC 12120 Wickchester Lane Houston, TX 77079 Telephone: (281) 588 3000 Email: PolymersSales@us.sasol.com	

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www.sasolnorthamerica.com
Melt Index: 0.33 g/10min
Density: 0.921 g/cm³

Features

- Tubular Resin
- Good mechanical properties
- Wide processing range

Applications

- Heavy Duty Sacks
- Heavy Duty Shrink film
- Agricultural Film
- Blending with LLDPE

Additives

- Antioxidant

Typical properties (not to be construed as specifications)		Value (SI)	Value (English)	Method
Resin Properties	Melt Index (190°C/2.16kg)	0.33 g/10 min	0.33 g/10 min	ASTM D1238
	Density	0.921 g/cm ³	0.921 g/cm ³	ASTM D1505
	Base Density ⁽¹⁾	0.921 g/cm ³	0.921 g/cm ³	Sasol Method
Film Properties	Tensile strength at yield MD	1800 psi	12 MPa	ASTM D882
	Tensile strength at yield TD	1800 psi	12 MPa	ASTM D882
	Tensile strength at break MD	4500 psi	31 MPa	ASTM D882
	Tensile strength at break TD	4000 psi	28 MPa	ASTM D882
	Elongation MD	150 %	150 %	ASTM D882
	Elongation TD	630 %	630 %	ASTM D882
	1% Secant Modulus MD	32000 psi	220 MPa	ASTM D882
	1% Secant Modulus TD	43000 psi	296 MPa	ASTM D882
	Elmendorf Tear MD	190 g	190 g	ASTM D1922
	Elmendorf Tear TD	150 g	150 g	ASTM D1922
	Dart Drop Impact Strength (F ₅₀)	180 g	180 g	ASTM D1709A
	Haze	15 %	15%	ASTM D1003
	Gloss (45°)	39	39	ASTM D2457

(1) Base density is calculated assuming that the product doesn't contain any antiblock additive.

The above values were measured on a 2 mil (50.8 µm) film produced on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 BUR using a die gap of 30 mil (0.8mm) die gap.



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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 ($<77^{\circ}\text{F}$ (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. The fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

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

It is further recommended that good housekeeping is practiced throughout the facility.