

LF 2103

Low Density Polyethylene

Information & Polyethylene Sales

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Sasol Polymers Middle East FZE

Film

Application

LF 2103 is a heavy duty film grade suitable for applications like shrink hoods, industrial sacks, carrier bags and liners.

Additives

Antioxidant

General information

LF2103 has been manufactured using Sabtec CTR® licensed technology and the appropriate manufacturing parameters and hence it is expected to be similar to **SABIC® LDPE 2100TN00** grade.

Performance properties – LF 2103

Test	Value	Unit	Test method
Physical Properties			
MFR (190°C/2.16kg)	0.3	g/10min	ISO 1133
Density	0.921	g/cm ³	ISO 1183
Mechanical Properties			
Tensile stress at yield	MD 11	MPa	ISO 527-1-2-3
	TD 10	MPa	
Tensile strength at break	MD 22	MPa	
	TD 24	MPa	
Strain at break	MD >350	%	
	TD >500	%	
Modulus of elasticity	MD 140	MPa	
	TD 150	MPa	
Tear strength	MD 20	kN/m	ISO 6383-2
	TD 45	kN/m	
Impact strength	31	g	ASTM D 4272
Thermal Properties			
Vicat softening temperature	93	°C	ISO 306

Film properties have been measured on film of 120µm thickness extruded using a BUR of 3:1



Processing

Low Density polyethylene **LF2130** is a grade with excellent toughness and outstanding biaxial shrink properties. The material contains only antioxidant, has a very low energy consumption during processing and has excellent draw down ability.

Packaging

Supplied in pellet form and can be packaged in 25kg bags.

Food Packaging

This material has been made with technology from SABTEC® with material and process parameters recommended by SABTEC®. In those circumstance where the product is to be used in food contact applications, the equivalent SABIC® grade information should be reviewed at www.SABIC-europe.com.

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 recommended that good housekeeping will practiced through out the facility

Storage

As ultraviolet light may cause a change in the material, all resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50°C. it is also advisable to process polyethylene resins (in pelletised or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Handling

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapours.

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.