#### HDPE - Interim Product Data Sheet

# Sasol reaching new frontiers

# **HF5101**High Density Polyethylene

Information & Polyethylene Sales

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### Sasol Polymers Middle East FZE

# HDPE – High Density Polyethylene

#### Application

**HF5101** is suitable for general purpose film applications and extrusion blow moldings. It can be used as blending resin for property modification.

#### **Additives**

Antioxidant

#### General information

**HF5101** has been manufactured using Basell Lupotech G® licensed technology and the appropriate manufacturing parameters and hence it is expected to be similar to **Basell Lupolen® HDPE5121B** grade.

## Performance properties — HF5101

Test		Value	Unit	Test method
Physical Properties MFR (190 ℃/21.6kg) Density		10 0.951	g/10min g/cm³	ISO 1133 ISO 1183
Mechanical Properties Tensile strength Tensile strain at break Tensile modulus Elmendorf tear strength	MD TD MD TD MD TD	55 55 580 620 1050 250 800	MPa MPa % MPa mN mN	ISO 527-1-2-3 ISO 6383-2
Thermal Properties Melting Point Vicat Temp (B50, 50° C/h	, 10N)	132 127	°C °C	ISO 3146 ISO 306

#### **Film Properties**

The film properties have been measured on 20 µm blown film extruded at BUR of 4:1



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#### **Packaging**

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

#### Food Packaging

This material has been made with technology from Basell Lupolen® with material and process parameters recommended by Basell Lpolen®. In those circumstance where the product is to be used in food contact applications, the equivalent Basell Lupolen® grade information should be reviewed at www.basell.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 during storage.

#### 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.