

# AMIR KABIR PETROCHEMICAL COMPANY

## HDPE EX5 (GM 9450 F)

### High Density Polyethylene

A M I R K A B I R P E T R O C H E M I C A L C O M P A N Y

#### **1 Product Description:**

"EX5 (GM 9450 F)" is a high Density polyethylene with Butene-1 as comonomer. It is a high molar mass for blown film with in comparison to EX4 lower stiffness and increased tenacity .The product has good toughness,low gel level and good tear strength.

Stabilization: Ca-Stearate, Zn-Stearate, Irgafos168

#### **2 Applications:**

- Food Grade.
- Blown films with paper like quality.
- Suitable for counter bags.
- Carrier bags.
- Wrapping films and sheets.
- Blending partner.

No.	Property	Units	Test Method	value
1 ▶	MFR(190 °C/5Kg)	g/10min	ISO 1133	0.28± 0.07
2 ▶	MFR(190 °C/21.6Kg)	g/10min	ISO 1133	8.0± 2.0
3 ▶	FRR5/21.6	----	----	30± 4
4 ▶	Density	g/cm <sup>3</sup>	ISO 1183	0.949 ± 0.002

Typical properties:  
these are not to be construed as specifications.

AKPC

HDPE

# HM9450F (EX5)

## PRODUCT DATA SHEET

HM-9450F (EX5) is blown film grade resin which is manufactured by suspension polymerization of ethene monomer. HM-9450F (EX5) is a bi-modal high density polyethylene with 1-Butene as comonomer.

### HDPE: HM9450F (EX5)

#### Characteristic Properties

- High molar mass film grade
- Good stiffness and tenacity

### Density: 0.947-0.951 g/cm<sup>3</sup>

#### Main Applications

- For blown films with paperlike quality, suitable for counter bags, carrier bags and wrapping films
- Excellent processing.

### MFR: 190/5: 0.23-0.33

#### Additives

- Antioxidant/Process stabilizer
- Lubricant (processing aid)/ acid scavenger

Material properties (This data are typical values and are not to be construed as product specifications.)

Test/Composition	Typical Value	Unit	ASTM Method
<b>Density</b>	0.949	g/cm <sup>3</sup>	ISO1183
<b>Fish Eye Note</b>	<3	note	Internal
<b>FRR 21.6/5</b>	29	h	
<b>MFR 190%21.6</b>	8.0	g/10 min	ISO1133
<b>MFR190%5</b>	0.28	g/10 min	ISO1133

- Test specimen from compression moulded sheet at 23°C.
- FRR values are statistical and calculated by dividing MFR values.
- Notch Impact Test specimen from compressed moulded sheet 23°C and The data quoted are average values



## HD-EX 5 License Grade Code HM 9450 F

### Product Description:

“EX 5” is a high density polyethylene with 1-Butene as co monomer. It is good toughness, low gel level, good toor strenght, good stiffness and tenacity, High molar mass.

### Applications:

- Film extrusion
- Counter bag, carrier bag
- Wrapping films & sheets

### Typical data

PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE*
Mass density (23 C)	ISO 1183	g/cm3	0.949
Melt Flow Rate (190 C/5.0kg)	ISO 1133	g/10min	0.28
Melt Flow Rate (190 C/21.16kg)	ISO 1133	g/10min	8
FRR(21.6/5)		-	29
FN	MPC-TEST	-	≤3/≤120

- Typical Values: not to be construed as specifications
- Blow film thickness 20  $\mu\text{m}$ , Extruded at melt temp. of 200 c and Blow up Ratio 4:1
- Recommended melt temp: 200~230 c
- Recommended film thickness: 10~200  $\mu\text{m}$



KERMANSHAH POLYMER COMPANY

Plant : **KERMAPOL**

Grade/Product Name : **EX5/HM9450F**

Catalyst : **THT**

**Technical Data**

**Product Description**

HM9450F is a high-density Polyethylene with 1-Butene as a co-monomer.

**Application:**

For blown films with paperlike quality, suitable for counter bagscarrier bags and wrapping films , excellent processing

**General**

Additive	<ul style="list-style-type: none"><li>Antioxidant, Lubricant</li></ul>
Features	<ul style="list-style-type: none"><li>High molar mass film grade</li><li>Good stiffness</li><li>Good tenacity</li></ul>
Forms	<ul style="list-style-type: none"><li>Pellet</li></ul>
Processing Method	<ul style="list-style-type: none"><li>Film</li></ul>

**Physical**

	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density <sup>1)</sup>	0.949±0.002	g/cm <sup>3</sup>	ISO1183
Melt Mass-Flow Rate (MFR) (190°C/5 kg)	0.28±0.05	g/10 min	ISO1133
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	8±2	g/10 min	ISO1133
Flow Rate Ratio (21.6 kg/5 kg) <sup>2)</sup>	29±4		-

**Impact**

	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Fish Eye Note	≤3		-

1) Test specimen from compression moulded sheet at 23 °C, samples not annealed

2) FRR values are statistical and calculated by dividing MFR values