

ILAM PETROCHEMICAL CO

# ILPC HDPE 7000F

HIGH DENSITY POLYETHYLENE

## DESCRIPTION

HD-7000F is a high molecular weight, high density polyethylene copolymer which has a broad molecular weight distribution. The design of the product, molecular architecture and density, gives it a unique combination of easy extrusion and high melt strength with strong physical properties which makes it suitable for producing thin films with excellent strength and rigidity.

#### **TYPICAL APPLICATIONS**

HD- 7000F is recommended for blown film extrusion. This product is suggested for the manufacture of high strength grocery sacks, shopping bags and high-quality thin films for multi-wall sack liners and replacement for thin paper products. Films produced with this product can be readily treated and printed to give high quality graphics.

## TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES (1)			
Melt Flow Rate (MFR)			
at 190°C and 5 kg load	0.04	g/10 min	ISO 1133
Density at 23°C <sup>(1)</sup>	952	kg/m³	ISO 1183
MECHANICAL PROPERTIES <sup>(2)</sup>			
Tensile Stress at Yield	27	MPa	ISO 527-1/-2
Tensile Stress at Break	>24	MPa	ISO 527-1/-2
Elongation at Break	>500	%	ISO 527-1/-2
Charpy Impact strength	NB	kJ/m²	ISO 179-1
Shore hardness	64	D scale	ISO 868
Stress cracking resistance	>600	Hr	ASTM 1693
Vicat softening temperature	131	ōC	ISO 11357
Melting temperature	124	ōC	ISO 306

(1) Typical values: not to be construed as specification limits.

(2) Based on compression molded sheet. Compression molding of test specimen according to ISO 1872-2 Conditioning of test specimen: temp. 23 °C, relative humidity 50 %, 24 hours

## PROCESSING CONDITIONS

Typical processing conditions for HD-7000F are:

Melt Temperature: 200 - 215°C

Frost line Height: 6-8 times die Ø

### STORAGE AND HANDLING

Polyethylene material should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. ILPC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance.

### Packaging

25 kg bag ,1375 Kg shrink film palletized.

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