

# FE8000 - Low Density Polythylene

# **Product Specification**

## **DESCRIPTION**

FE8000 is an additive free grade, produced by a high pressure tubular process, mainly recommended for light and medium duty film applications with good optical properties and medium rigidity.

# **PROPERTIES**

Films produced with FE8000 are suficiently rigid for automatic packaging machines, suitable for shrink wrapping and have good optical properties.

POLYMER PROPERTIES	VALUE	UNIT	TEST METHOD
Melt Flow Index	0.80	g/10 min	ASTM D-1238
Density@23°C	0.923	g/cm3	ASTM D-792
Crystalline Melting Point	111	°C	ASTM E-749
Vicat Softening Point	97	°C	ASTM D-1525

FILM PROPERTIES	VALUE	UNIT	TEST METHOD
Tensile Strength@Yield MD/TD	12/12	Мра	ASTM D-882
Tensile Strength@Break MD/TD	34/27	MPa	ASTM D-882
Elongation@Break MD/TD	410/615	%	ASTM D-882
Impact Strength, F50	115	g	ASTM D-1709
Tear Resistance MD/TD	70/40	N/mm	ASTM D-1922
Puncture Force	51	N/mm	Internal Method
Coefficient Of friction	0.9	-	ASTM D-1894
Haze	7	%	ASTM D-1003
Gloss °(@45 °)	61	-	ASTM D-2457

(Film properties stated above have been obtained using 40µm blown films laboratory test specimens produced under following conditions: 45mm screw with L/D = 30, die diameter 120mm, die gap 1.56mm, BUR 2.5:1)



#### **PROCESSING**

FE8000 can be easily processed on all types of extruders designed for polyethylene and over a wide range of extrusion conditions.

The melt temperature is suggested to be in the range of 160-180 °C.

The best properties of the blown | Im are achieved at blow up ratios between 2:1 and 3:1.

The recommended thickness range is from 30 µm to 200 µm.

#### **APPLICATIONS**

- Shrink wrap film for light and medium duties
- Shopping bags
- Lamination film

#### **HANDLING & STORAGE**

Polyethylene products should be stored in their original packaging or in clean appropriate silos.

The products should be stored in a dry and well-ventilated area and should not be exposed to direct sunlight and/ or heat in any form since this may adversely affect their properties.

As a general rule, our products should not be stored for more than three months from receipt date.

# **SAFETY**

Under normal conditions FE8000 product does not present a toxic hazard through skin contact or inhalation. For detailed information please refer to the Safety Data Sheet.

**NOT SUITABLE FOR PHARMACEUTICAL OR MEDICAL APPLICATIONS** FE8000 product is not suitable for pharmaceutical or medical applications.

#### **Technical Disclaimer**

The values reported in this technical data sheet are the results of tests carried out in accordance with standard test procedures in a laboratory environment. Actual properties may vary depending on batch and extrusion conditions. Therefore, these values should not be used for speci cation purposes. Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the speci c use in question, and is further advised against relying on the information contained herein as it may relate to any speci c use or application. It is the ultimate responsibility of the user to ensure that the product is suitable for, and the information is applicable to, the user's speci c application. Muntajat does not make, and expressly disclaims, all warranties, including warranties of merchantability or tness for a particular purpose, regardless of whether oral or written, expressed or implied, or allegedly arising from any usage of any trade or from any course of dealing, in connection with the use of the information contained herein or the product itself. The user expressly assumes all risks and liabilities, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Trademarks may not be used in any manner other than expressly authorized in a written agreement and no trademark or license rights of any kind are granted hereunder, by implication or otherwise.