

**7000F (FILM GRADE)**
**PRODUCT DESCRIPTION**

7000F is a high density polyethylene resin ; a product of bi-modal process from Mitsui Chemicals, Inc. of Japan

**TYPICAL APPLICATION**

- ◆ Recommend film thickness at 10-25 micron
- ◆ High tensile strength with good dart impact strength
- ◆ Low gel content
- ◆ Good moisture barrier
- ◆ Food contact applicable
- ◆ Good impact resistance and processability
- ◆ Shopping bag and T-shirt bag
- ◆ Garbage bag
- ◆ Liner bag
- ◆ Enhanced ultra thin film
- ◆ High stiffness
- ◆ Wide service Temperature range, UV resistance

**PROPERTIES**
**Physical properties**

Property	Test Method	Value	Unit
<b>Resin Properties</b>			
Melt Flow Rate	ASTM D 1238 @ 190 °C, 2.16 kg	0.03-0.05	g/10 min
Density	ASTM D 1505	0.950-0.954	g/cm3
Melting Point	ASTM D 2117	130 -140	°C
Vicat Softening Point	ASTM D 1525	124	°C
Brittleness Temperature	ASTM D 746	< -60	°C
ESCR	ASTM D 1693 @ 50 °C (Condition: Compression Molded, 25% Igepal)	> 1000	hrs, F50
<b>Film Properties</b>			
Tensile Strength at Yield	ASTM D 638 @ crosshead speed 50mm/min	MD: 380*, TD: 250*	kg/cm2
Tensile Strength at Break	ASTM D 638 @ crosshead speed 50mm/min	MD: 620*, TD: 310*	kg/cm2
Tensile Modulus, 2% Secant	ASTM D 638 @ crosshead speed 50mm/min	MD: 8200*, TD: 8000*	kg/cm2
Elongation at Break	ASTM D 638 @ crosshead speed 50mm/min	MD : 240*, TD : 450*	%
Elmendorf Tear Strength	ASTM D 1922	MD : 3*, TD : 80*	g
Dart Impact Strength	ASTM D 1709	139*	g
Gloss	ASTM D 2457	5.8	GU
Haze	ASTM D1003	85.5	%

(\*) Properties obtained from film produced on a pilot line , 10 micron, BUR 5:1, MD = Machine Direction, TD = Transverse Direction

Note : Conversion factor for changing unit from kg/cm2 to MPa is divided by 10.2

## PROCESSING TECHNIQUES

The actual extrusion condition depends on type of using machine, size and film thickness of product required.

Generally, melt temperature should be 190-210 oC with BUR = 3-5 times and frost line height (FLH) = 8-10 times of die diameter.

## Product Technical Assistance

For technical assistance or further information on this product contact MHPC technical team at the address or telephone number as specified below.

## 7000F (FILM GRADE)

### PRODUCT AVAILABLE FORM AND PACKAGING

- ◊ Pellet
- ◊ 25 kg loose bag
- ◊ Big bag with specified weight

## STORAGE

- ♦ Store in original container in tidy according to the manual of Handling and Storage from Mehr Petrochemical Company .
- ♦ Product(s) should be stored in dry and dust free location at temperature below 50oC and protected from direct sunlight and/or heat, well-ventilated area, away from incompatible materials and food and drink, as this may lead to quality deterioration, which results in odor generation and color changes and can have negative effects on the physical properties of this product.
- ♦ Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination
- ♦ The storage area should be stable and not be sloped.

## SAFETY

- ♦ The product is not classified as a hazardous material.
- ♦ Please see our Material Safety Data Sheet for details on various aspects of safety, recovery, and disposal of the products;
- ♦ For more information, contact Mehr Petrochemical company technical service.

## RECYCLING

- ♦ The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling
- ♦ Please see our Material Safety Data Sheet for details on various aspects of safety, recovery, and disposal of the products.
- ♦ For more information, contact Mehr Petrochemical company technical service.

## RELATED DOCUMENTS

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.

- ♦ Material Safety Data Sheet
- ♦ Statement on compliance to food contact regulations

## DISCLAIMER

- ♦ The product can be used only for the application as specified here above.