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Product: HDPE 7000F

Producer: Mehr Petrochemical Co.

Description:

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

Application:

- Recommend film thickness at 10-25 microns
- 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

Typical Properties:

| Typical Test | Test Method | Spec | Unit | | | | |
|---|-------------------------------|--------|----------|--|--|--|--|
| Resin Properties | | | | | | | |
| Melt Flow Rate | ASTM D 1238 @ 190 °C, 2.16 kg | 0.04 | g/10 min | | | | |
| Density | ASTM D 1505 | 0.954 | g/cm³ | | | | |
| Melting Point | ASTM D 2117 | 131 | °C | | | | |
| Vicat Softening Point | ASTM D 1525 | 124 | °C | | | | |
| Brittleness Temperature | ASTM D 746 | < -60 | °C | | | | |
| ESCR | ASTM D 1693 @ 50 °C | > 1000 | hrs, F50 | | | | |
| (Condition: Compression Molded, 25% Igepal) | | | | | | | |
| Film Properties | | | | | | | |

Disclaimer:

This information is based on our current knowledge and experience. In view of many factors that may affect processing and application, this data does not relive processors from the responsibility of carrying out their own tests and experiments, neither does it imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.



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| Tensile Strength at Yield | ASTM D 638 @ crosshead speed 50 mm/min | MD: 380*, TD: 250* | Kg/cm² |
|-------------------------------|--|------------------------|--------|
| Tensile Strength at Break | ASTM D 638 @ crosshead speed 50 mm/min | MD: 620*, TD: 310* | Kg/cm² |
| Tensile Modulus, 2% Secant | ASTM D 638 @ crosshead speed 50 mm/min | MD:8200*, TD: 8000* | Kg/cm² |
| Elongation at Break | ASTM D 638 @ crosshead speed 50 mm/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 D 1003 | 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 Conditions:

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

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

Product Available Form and Packaging:

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

Storage:

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Store in original container in tidy according to the Manual Handling and storage from Mehr petrochemical Company.

Product(s) should be stored in dry and dust free location at temperature below 50 °C 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 odour 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 released 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 slopped.

Safety:

The product is not classified as a hazardous material.

Please see Material Safety Data Sheet for details on various aspects of safety, recovery and disposal of the product(s).

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 Material Safety Data Sheet for details on various aspects of safety, recovery and disposal of the product(s).

Related Documents:

Material Safety Data Sheet

Statement on compliance to food contact regulations

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