

**NAME: HF5110**

**Product Description:**

HF 5110 is a high molecular weight high density polyethylene.

**Applications:**

HF 5110 is suitable for Extrusion, film, blown, bags and density modifies.

**Typical data: (Table)**

| Properties                   | Value | Unit              | Test method |
|------------------------------|-------|-------------------|-------------|
| Density                      | 951   | kg/m <sup>3</sup> | ISO 1183    |
| MFR (190°C/21.6kg)           | 10    | dg/min            | ISO 1133    |
| Tensile Modulus              | 1050  | MPa               | ISO527-1,2  |
| Tensile Strength(MD)         | 55    | MPa               | ISO 527-1,3 |
| Tensile Strength(TD)         | 55    | MPa               | ISO 527-1,3 |
| Tensile Strain at Break(MD)  | 580   | %                 | ISO 527-1   |
| Tensile Strain at Break(TD)  | 620   | %                 | ISO 527-1   |
| Tensile Stress at Yield      | 26    | MPa               | ISO 527-1   |
| Tensile Strain at Yield      | 10    | %                 | ISO 527-1   |
| Elmendorf tear strength(MD)  | 250   | mN                | ISO 6383-2  |
| Elmendorf tear strength(TD)  | 800   | mN                | ISO 6383-2  |
| Melting Point                | 132   | °C                | ISO 3146    |
| Vicat Temp, (A50,50°C/h,10N) | 127   | °C                | ISO 306     |

The above data are typical laboratory average. They are intended to serve as guides only

Film properties taken from 20m blown film extruded at a melt temperature of 220°C, long stalk process, and a blow-up ratio of 4:1.

Additive: Antioxidant - Heat stabilizer - Zinc Stearate

**Processing**

Recommended film thickness: 15 to 50m. Food packaging

HF 5110 meets the relevant requirements of plastics directive 2002/72/EC (06-08-2002) and its amendments till directive 2008/39EC relating to plastic materials and articles intended to come into contact with foodstuffs.

### **Pharmaceutical Application:**

HF 5110 meets the requirements of the European pharmacopeia version 6 section 3.1.5 for pharmaceutical application.

### **Conveying:**

Conveying equipment should be designed to prevent accumulation of fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

be equipped with adequate filters

is operated and maintained in such a manner to ensure no leaks develop

that adequate grounding exists at all times We further recommended that good housekeeping will practiced throughout the facility

### **Storage:**

As ultraviolet light may cause a change in the material, all resins should be protected from direct sunlight and/or heat during storage. The storage location should also be dry, dust free and the ambient temperature should not exceed 50. It is also advisable to process polyethylene resins (in pelletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality

### **Handling:**

Minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapors.

### **Combustibility:**

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources .in burning; polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and mist preferred. In enclosed areas, fire fighters should be provided with self-contained breathing apparatus.

### **Note:**

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.