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HF5110

High Density Polyethylene

Film

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

Properties	Value	Unit	Test method
Density	951	kg/m3	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
Elemendorf tear strength(MD)	250	mN	ISO 6383-2
Elemendorf 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 20 µm 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

Producer: Arya Sasol Petrochemical Co.
Licensor: Basell

Processing

Recommended film thickness: 15 to 50 µm.

Packaging

Supplied in pellet form and can be packaged in 25Kg Bags, one ton semi bulk or 17 tons bulk containers.

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:

1. be equipped with adequate filters
2. is operated and maintained in such a manner to ensure no leaks develop
3. 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 from) 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.