



ASPC

Process OptimizationDoc
Name:

Product Data sheet -High Density polyethylene

HCH 5110

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Doc No.

TEC-PRO-PDS-009

Rev: 4

Typical Data

كوثر شيمي

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Properties	Value	unit	Test method
Physical Properties			
Density (23 °C)	951	kg/cm ³	ISO 1183
MFI (190 °C /21.6Kg)	10	dg/min	ISO 1133
Mechanical properties			
Tensile Modulus of elasticity	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
Thermal Properties			
Melting Point	132	°C	ISO 3146
Vicat Temperature , (A50,50 °C/h , 10 N)	127	°C	ISO 306
Additive :Antioxidant –Heat stabilizer Zinc Stearate			

Notes:

Typical properties; not to be construed as specifications.

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.

Application


HCH 5110 is suitable for Film, Bags, Products for Use in Property Modification

General information

HCH5110 has been manufactured using Basell Lupotech G licensed technology.

Processing

Recommended film thickness: 15 to 50 µm.

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Packaging

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

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Food packaging

The above mentioned grade 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

The above mentioned grade 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 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.