SABIC® HDPE F00950

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HDPE F00950 resin is a high molecular weight, high density polyethylene copolymer. The design of the product, molecular architecture and density, gives F00950 a good balance of easy extrusion and high melt strength with strong physical properties.
SABIC® HDPE F00950 is typically used for production of thin films with good strength and rigidity. The material contains anti-oxidants.

SABIC® HDPE F00950 resin is typically used for blown film extrusion and production of high strength grocery sacks, shopping bags and high quality thin films for multi wall sack liners and replacement for thin paper products.

SABIC® HDPE F00950 can be extruded on conventional HMW-HDPE equipment with temperature settings between 200 and 220°C.

Film properties have been measured at 25 µm films with a BUR = 4.Film has been produced on Kiefel IBC film blown line at 160 kg/h with a die of 150 mm, die gap of 1.2 mm and a frostline height of 150 cm (= 10D).

This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL PROPERTY VALUES

Revision 20220929

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	0.07	dg/min	ISO 1133
at 190 °C and 5 kg	0.30	dg/min	ISO 1133
at 190 °C and 21.6 kg	8.5	dg/min	ISO 1133
Density	950	kg/m³	ISO 1183
FILM PROPERTIES			
Impact strength	35	kJ/m	ASTM D4272
Tear strength TD	20	kN/m	ISO 6383-2
Tear strength MD	6	kN/m	ISO 6383-2
Tensile test film			
Yield stress TD	30	MPa	ISO 527-3
Yield stress MD	30	MPa	ISO 527-3
Stress at break TD	50	MPa	ISO 527-3
Stress at break MD	40	MPa	ISO 527-3
Strain at break TD	400	%	ISO 527-3
Strain at break MD	300	%	ISO 527-3
Modulus of elasticity TD	620	MPa	ISO 527-3
Modulus of elasticity MD	620	MPa	ISO 527-3

ENVIRONMENT AND RECYCLING

The environmental aspects of any packaging material do not only imply waste issues but have to be considered in relation with the use of natural resources, the preservations of foodstuffs, etc. SABIC considers polyethylene to be an environmentally efficient packaging material. Its low specific energy consumption and insignificant emissions to air and water designate polyethylene as the ecological alternative in comparison with the traditional packaging materials. Recycling of packaging materials is supported by SABIC whenever ecological and social benefits are achieved and where a social infrastructure for selective collecting and sorting of packaging is fostered. Whenever 'thermal' recycling of packaging (i.e. incineration with energy recovery) is carried out, polyethylene -with its fairly simple molecular structure and low amount of additives- is considered to be a trouble-free fuel.

STORAGE AND HANDLING

Polyethylenes resins (in pelletised or powder form) should be stored in such a way that it prevents exposure to direct sunlight and/or heat, as this may lead to quality deterioration. The storage location should also be dry, dust free and the ambient temperature should not exceed 50 °C. Not complying with these precautionary measures can lead to a degradation of the product which can result in colour changes, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletised or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

DISCLAIMER