SABIC® HDPE F00952J

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HDPE F00952J resin is a high molecular weight, TNPP free high density polyethylene copolymer. The design of the product, molecular architecture and density, gives F00952J a good combination of easy extrusion and high melt strength with strong physical properties. Typical applications are thin films with excellent strength and rigidity. The material contains anti-oxidants.

SABIC® HDPE F00952J 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 F00952J can be extruded on conventional HMW-HDPE equipment at melt temperature settings between 200 and 220 °C.

Film properties have been measured at 15 µm blown film with a BUR = 4.

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

TYPICAL PROPERTY VALUES

Revision 20221104

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	0.05	dg/min	ISO 1133
at 190 °C and 21.6 kg	9.5	dg/min	ISO 1133
Density	952	kg/m³	ASTM D1505
FILM PROPERTIES			
Dart Impact F50	180	g	ASTM D1709
Tear strength TD Elmendorf	60	g/µm	ASTM D1922
Tear strength MD Elmendorf	12	g/µm	ASTM D1922
Tensile test film			
Strain at break TD	550	%	ASTM D882
Stress at break MD	66	MPa	ASTM D882
Stress at break TD	64	MPa	ASTM D882
Yield stress MD	33	MPa	ASTM D882
Modulus of elasticity MD	1250	MPa	ASTM D882
Yield stress TD	40	MPa	ASTM D882
Modulus of elasticity TD	1500	MPa	ASTM D882
Strain at break MD	400	%	ASTM D882
THERMAL PROPERTIES			
Vicat Softening Temperature			
	125	°C	ASTM D1525

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 Europe 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 Europe 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