

SABIC HDPE F00952EQ

High density polyethylene for Blown film

Description

SABIC® HDPE F00952EQ resin is a high molecular weight, high density polyethylene copolymer which has a broad molecular weight distribution. The design of the product, molecular architecture and density, gives F0952EQ a unique combination of easy extrusion and high melt strength with strong physical properties which makes it suitable for producing very thin films with excellent strength and rigidity. The material contains anti oxidant .

Application

SABIC® HDPE F00952EQ resin is recommended for blown film extrusion. This product is suggested for the manufacture of high strength grocery sacks, shopping bags and high quality thin films for multi wall sack liners and replacement for thin paper products.

Processing conditions

SABIC® HDPE F00952EQ can be extruded on conventional HMW-HDPE equipment at melt temperatures between 200 and 235 °C.

Film properties

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

Typical data.

Properties	Units SI	Values	Test methods
Polymer properties			
Melt flow rate (MFR)			ISO 1133
at 190 °C and 2.16 kg	g/10 min	0.05	
at 190 °C and 21.6 kg	g/10 min	8.5	
Density	kg/m ³	952	ISO 1183
Formulation			
Anti oxidant	mg/kg	+	SABIC method
Film properties			
Dart Impact F50	g	180	ASTM D 1709
Tear strength TD Elmendorf	g	60	ASTM D 1922
Tear strength MD Elmendorf	g	12	ASTM D 1922
Tensile test film			ASTM D 882
Yield stress TD	MPa	40	
Yield stress MD MPa 33	MPa	33	
Stress at break TD	MPa	64	
Stress at break MD	MPa	66	
Strain at break TD	%	550	
Strain at break MD	%	400	
Modulus of elasticity TD	MPa	1500	
Modulus of elasticity MD	MPa	1250	
Thermal properties			
Vicat softening temperature	°C	125	ASTM D 1525

General information. SABIC® HDPE copolymer film grades offer, as a result of their relative wide molecular weight distribution a well balanced combination of processing properties, draw down and film properties such as: toughness, impact resistance, stiffness and sealability.