

SABIC® HDPE FJ00952

HIGH DENSITY POLYETHYLENE

DESCRIPTION

FJ00952 is TNPP additive free grade, high molecular weight High Density Polyethylene copolymer which has a broad molecular weight distribution. The design of the product, molecular architecture and density, gives it a unique combination of easy extrusion and high melt strength with strong physical properties which makes it suitable for producing thin films with excellent strength and rigidity.

TYPICAL APPLICATIONS

FJ00952 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. Films of this product can be readily treated and printed to give high quality graphics.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES Melt			
Flow Rate			
at 190°C and 2.16 kg	0.05	g/10 min	ASTM D1238
at 190°C and 21.6 kg	9	g/10 min	ASTM D1238
Density			
at 23°C	952	k g/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Dart Impact Strength	180	g/μm	ASTM D1709
FILM PROPERTIES			
Tensile Properties (1)			
stress at break, MD	60	MPa	ASTM D882
stress at break, TD	56	MPa	ASTM D882
strain at break, MD	400	%	ASTM D882
strain at break, TD	550	%	ASTM D882
stress at yield, MD	33	MPa	ASTM D882
stress at yield, TD	31	MPa	ASTM D882
1% secant modulus, MD	1250	MPa	ASTM D882
1% secant modulus, TD	1500	MPa	ASTM D882
Elmendorf Tear Strength			
MD	12	g	ASTM D1525
TD	60	g	ASTM D1525
THERMAL PROPERTIES			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Vicat Softening Temperature	125	°C	ASTM D1525

(1) Properties are based on 15 µm film produced at 4 BUR using 100% FJ00952.

PROCESSING CONDITIONS

Typical processing conditions for FJ00952 are:

Melt Temperature: 200 - 235°C

Frost line Height: 6 - 8 times die Ø

BUR: 3 - 5

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, Additional specific information can be requested via your local Sales Office.

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

STORAGE AND HANDLING

Polyethylene material should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.