

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

| 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/m ³ | 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 |