

SABIC® LLDPE 118W

Linear Low Density Polyethylene

Saudi Basic Industries Corporation (SABIC)

Product Description

SABIC® LLDPE 118W is a butene-linear low density polyethylene resin for general purpose applications. Films produced from this resin are tough with excellent puncture resistance, high tensile strength and good hottack properties. The resin contains anti block and slip erucamide.

Typical applications for SABIC® LLDPE 118W are shipping sacks, ice bags, frozen food bags, liners, carrier bags, garbage bags, agriculture films, lamination and coextruded films, shrink film (for blending with LDPE), industrial consumer packaging and high clarity film if blended with (10-20%) LDPE.

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/medical applications.

General

Additive	• Antiblock (3500 ppm)	• Antioxidant	• Erucamide Slip (1500 ppm)
Features	• Antiblocking • Antioxidant • Butene Comonomer	• Food Contact Acceptable • General Purpose • Good Toughness	• High Tensile Strength • Puncture Resistant • Slip
Uses	• Bags • Film	• Food Packaging • Liners	• Packaging
Forms	• Pellets		
Processing Method	• Blown Film		

Physical	Nominal Value Unit	Test Method
Density	0.918 g/cm ³	ISO 1183/A
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.0 g/10 min	ISO 1133
Mechanical	Nominal Value Unit	Test Method
Coefficient of Friction (Blown Film)	0.10	ISO 8295
Films	Nominal Value Unit	Test Method
Film Thickness - Tested	50 µm	
Tensile Modulus		ISO 527-3
MD: 50 µm, Blown Film	160 MPa	
TD: 50 µm, Blown Film	180 MPa	
Tensile Stress		ISO 527-3
MD: Yield, 50 µm, Blown Film	11.0 MPa	
TD: Yield, 50 µm, Blown Film	11.0 MPa	
MD: Break, 50 µm, Blown Film	37.0 MPa	
TD: Break, 50 µm, Blown Film	30.0 MPa	
Tensile Elongation		ISO 527-3
MD: Break, 50 µm, Blown Film	600 %	
TD: Break, 50 µm, Blown Film	800 %	
Elmendorf Tear Strength ²		ISO 6383-2
MD: 50.0 µm	40.0 kN/m	
TD: 50.0 µm	120.0 kN/m	
Impact	Nominal Value Unit	Test Method
Impact Strength - Blown Film (50.0 µm)	220 J/cm	ASTM D4272
Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature	101 °C	ISO 306/B
Melting Temperature (DSC)	121 °C	Internal Method
Optical	Nominal Value Unit	Test Method
Gloss (45°, 50.0 µm, Blown Film)	42	ASTM D2457
Haze (50.0 µm, Blown Film)	20 %	ASTM D1003A
Clarity - Blown Film (50.0 µm)	0.0200 V	Internal Method
Additional Information	Nominal Value Unit	Test Method
Blocking - Blown Film	15 g	Internal Method
Puncture Resistance - Blown Film (50.0 µm)	380 J/m	Internal Method
Re-blocking - Blown Film	10 g	Internal Method