

SABIC® LLDPE 118WM

PROVISIONAL TECHNICAL DATA SHEET LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® LLDPE 118WM is a butane-1 linear low density polyethylene resin typically used for general purpose applications and also suitable for blending with conventional LDPE. Film made from LLDPE 118WM exhibit a good puncture resistance, high tensile strength and good hot tack properties. It contains antioxidant, slip and anti blocking agents.

TYPICAL APPLICATIONS

Shipping sacks, ice bags, frozen food bags, stretch wrap film, produce bags, liners, carrier bags, garbage bags, agricultural films, laminated and coextruded films for meat wrap, frozen food and other food packaging, shrink film (for blending with LDPE), industrial consumer packaging, and high clarity film applications if blended with $(10^{\sim}20\%)$ LDPE.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	0.9	g/10 min	ISO 1133
Density	920	kg/m³	ISO 1183
MECHANICAL PROPERTIES (1)			
Tensile strength			
at Yield, MD	11	MPa	ISO 527-3
at Yield, TD	12	MPa	ISO 527-3
Tensile Elongation			
at Break, MD	750	%	ISO 527-3
at Break, TD	850	%	ISO 527-3
Dart Impact Strength	150	g	ASTM D1709
OPTICAL PROPERTIES			
Haze	17	%	ISO 14782
Gloss @ 45°	45	-	ASTM D2457

⁽¹⁾ Properties have been measured by producing 38 μm film with 2:1 (BUR) using 100% 118WM.

PROCESSING CONDITIONS

Typical processing conditions for 118WM are:Melt temperature: 195 - 215 $^{\circ}$ C, Blow up ratio: 2.0 - 3.0

STORAGE AND HANDLING

Polyethylene resin 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 do not 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 polyethylene resin within 6 months after delivery.