

SABIC[®] LLDPE 518N

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC[®] LLDPE 518N is a butene linear low density polyethylene resin. Films produced from this resin have high toughness, good puncture resistance, good heat sealing behaviour and excellent machinability on conversion lines. Typical applications for SABIC[®] LLDPE 518N are heavy duty shipping sacks, ice bags, frozen food bags, potato bags and agriculture films. Film properties: Film of 50 µm and BUR=2 has been produced on Kiefel IBC with 130 kg/h. Die size 200 mm, die gap 2,7 mm. 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			
at 190 °C and 2.16 kg	0.5	dg/min	ISO 1133
Density	918	kg/m ³	ASTM D1505
OPTICAL PROPERTIES			
Gloss (45°)	55	%	ASTM D2457
Haze	13	%	ASTM D1003
FILM PROPERTIES			
Impact strength	27	kJ/m	ASTM D4272
Tear strength TD	180	kN/m	ISO 6383-2
Tear strength MD	30	kN/m	ISO 6383-2
Puncture resistance	750	J/m	SABIC method
Tensile test film			
Modulus of elasticity MD	170	MPa	ISO 527-3
Strain at break MD	550	%	ISO 527-3
Yield stress TD	11	MPa	ISO 527-3
Stress at break TD	32	MPa	ISO 527-3
Modulus of elasticity TD	180	MPa	ISO 527-3
Strain at break TD	800	%	ISO 527-3
Stress at break MD	40	MPa	ISO 527-3
THERMAL PROPERTIES			
Vicat Softening Temperature			
at 10 N (VST/A)	104	°C	ISO 306
DSC test			
melting point	120	°C	SABIC method