518N

Linear Low Density Polyethylene for Blown Film

Product Description

518N is fractional melt index Linear Low Density Polyethylene grade suitable for high strength packaging applications. Films produced using these resins gives outstanding toughness, excellent puncture resistance, good sealing characteristics and machinability on conversion lines.

Typical Applications

Heavy duty shipping sacks, Ice & frozen food bags, agricultural films etc.

Typical data

Properties	Unit	Value [1]	ASTM Method
Resin Properties			
Melt Flow Rate @ 190°C & 2.16 kg load	g/10 min.	0.5	D 1238
Density @ 23°C	kg/m^3	918	D 1505
Mechanical Properties[2]			
Tensile Strength @ break, MD	MPa	45	D 882
TD		38	
Tensile Elongation @ break, MD	%	670	D 882
TD		850	
Tensile Strength @ yield, MD	MPa	11	D 882
TD		10	
1% Secant Modulus, MD	MPa	250	D 882
TD		270	
Puncture Resistance	J/mm	89	SABIC Method
Dart Impact Strength	g	135	D 1709
Elmendorf Tear Strength, MD	g	180	D 1922
TD		400	
Optical Properties[2]			
Haze	%	12	D 1003
Gloss @ 60°	-	80	D 2457
Thermal Properties			
Vicat Softening Point	°C	102	D 1525

(1) Typical values; not to be construed as specification limits.
(2) Properties have been measured by producing 30 µ film with 2.5 BUR using 100% 518N.

Processing Conditions

Typical processing conditions for 518N are:
Melt temperature: 205 - 220°C
Blow up ratio: 2 - 3

Food Regulation

518N is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

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 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.