218 Series

Linear Low Density Polyethylene for Blown Film

Product Description

218 series resins are Linear Low Density Polyethylene grades suitable for general purpose packaging. They are easy to process giving good tensile properties, impact strength and optical properties.

218 Series includes following grades:

218N: No Slip & No Antiblock

218W: 1500 ppm Slip & 3500 ppm Antiblock

Typical Applications

Lamination film, thin liners, shopping bags, carrier bags, garbage bags, coextruded films, consumer packaging etc.

Typical data

Properties	Unit	Value (1)	ASTM Method
Resin Properties			
Melt Flow Rate @ 190°C & 2.16 kg load	g/10 min.	2	D 1238
Density @ 23°C	kg/m^3	918	D 1505
Mechanical Properties(2)			
Tensile Strength @ break, MD	MPa	35	D 882
TD		29	
Tensile Elongation @ break, MD	%	700	D 882
TD		750	
Tensile Strength @ yield, MD	MPa	12	D 882
TD		10	
1% Secant Modulus, MD	MPa	220	D 882
TD		260	
Puncture Resistance	J/mm	63	SABIC Method
Dart Impact Strength	g	85	D 1709
Elmendorf Tear Strength, MD	g	130	D 1922
TD		320	
Optical Properties(2)			
Haze	%	13	D 1003
Gloss @ 60°	-	80	D 2457
Thermal Properties			
Vicat Softening Point	°C	98	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% 218N.

Processing Conditions

Typical processing conditions for 218 are:

Melt temperature: 185 - 205°C

Blow up ratio: 2 - 3

Food Regulation
218 series resins are 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.