

## 218 Series

LLDPE for Film Applications

218 Series are general purpose film grades Linear Low Density Polyethylene (LLDPE) resins. They are easy to extrude and exhibit excellent drawdownability. Films produced from these resins are tough with good puncture resistance, high tensile strength and good hot tack properties.

218 Series includes the following grades:

Grade	Antiblock (ppm)	Slip (ppm)	Applications
218N *	None	None	General purpose films, blending stock for other resins.
218Z	3500	1000	General purpose medium gauge films.
218W	3500	1500	General purpose thin gauge films
218WS**	2700	1400	High clarity thin gauge film.

\* Must be modified with Slip/Antiblock as required.

\*\* High Clarity film.

### Typical Applications

Garment bags, thin gauge liners, garbage bags, laminated and coextruded films for meat wrap and other food packaging, coextruded cast stretch wrap films and consumer packaging.

Physical Properties		Unit	Value <sup>(1)</sup>	Test Method
Melt index		G/10 min.	2	D-1238
Density		G/cm <sup>3</sup>	0.918	D-792
Film Properties *				
Tensile strength @ yield	MD	MPa	12	D-882
	TD		10	
Tensile strength @ break	MD	MPa	35	D-882
	TD		29	
Tensile elongation @ break	MD	%	700	D-882
	TD		750	
1% Secant modulus	MD	MPa	220	D-882
	TD		260	
Dart drop impact, F <sub>50</sub>		g	110	D-1709
Puncture resistance		J/mm	63	SABIC method
Elmendorf tear strength	MD	g	135	D-1922
	TD		400	
Gloss 60° angle		-	60	D-2457
Haze		%	15	D-1003

\* The film properties have been measured on 218N (30 μ film, 2.5:1 blow-up ratio)

(1) Typical values should not be construed as specification limits.

### *Processing conditions*

218 Series resins are extrudable by conventional blown film extrusion equipment, with only minor equipment modifications necessary for optimum use. For blown film, the best properties are achieved at blow up ratio (BUR) of 2:1 to 3:1. These products can be drawn to 12 microns gauge.

Extrusion temperatures = 190 - 220° C  
Blow-up ratio = 2:1 - 3:1

### *Food Regulation*

Certificate is available on request.

*NOTICE: The information and data contained herein are believed to be correct and given in good faith, but because of the many particular factors which are outside our knowledge and control and affect the use of product, no warranty is given or is to be implied with respect to such information, nor do we offer any warranty of immunity against infringement.*

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