

### ICELENE LL118 Butene Copolymer LLDPE Film Resins

#### Applications:

Agricultural Film, Industrial Liners and packaging,  
Garment Bags

#### Additive packages

AA Slip (0 ppm), Antiblock (0 ppm)  
BB Slip (0 ppm), Antiblock (4000 ppm)  
Slip (1500 ppm), Antiblock (5000 ppm)

#### PRODUCT DESCRIPTION

ICELENE LL118 is a certified prime resin intended for use in blown film applications. ICELENE LL118 resin complies with the specifications contained in the U.S. Food and Drug Administration (FDA) regulation 21 CFR 177.1520 for olefin polymers, para. (c) 3.2a, and may thus be used in the United States as an article or component of an article intended for use in contact with food, without temperature or food-type restrictions, subject to technical suitability.

Properties*	Test Method	Metric Units		English	
		Typical Value	Unit	Typical Value	Unit
Melt Flow Index <sup>2</sup>	ASTM D1238	1.0	g/10 min.	1.0	g/10 min
Density (23°C)	ASTM D792	0.918-0.922	g/cm <sup>3</sup>	0.918-0.922	g/cm <sup>3</sup>
<b>Film Properties<sup>1</sup></b>					
Tear Strength					
MD	ASTM D1992	170	g	170	g
TD	ASTM D1992	320	g	320	g
Dart Drop Impact Strength F50	ASTM D1709/A	90	g	90	g
Tensile Strength					
MD	ASTM D882	36.5	Mpa	5300	psi
TD	ASTM D882	26.9	Mpa	3900	psi
Yield Strength					
MD	ASTM D882	10.7	MPa	1550	psi
TD	ASTM D882	11	MPa	1600	psi
Elongation					
MD	ASTM D882	580	%	580	%
TD	ASTM D882	690	%	690	%

\* Typical Value of Properties which can vary with in specification limits and are not to be construed as specifications.

<sup>1</sup> Film properties are typical of blown film extruded on a 2.5" extruder with 4" die and 100-mil die gap at a blow up ratio of 2.5:1 but are dependent upon operatin Conditions.

<sup>2</sup> Condition 190°C/2.16 kg.

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