

## ICELENE LL4118 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)
CC Slip (1500 ppm), Antiblock (5000 ppm)

## **PRODUCT DESCRIPTION**

ICELENE LL4118 is a certified prime resin intended for use in blown film applications. ICELENE LL4118 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*		Metric Units		English	
	Test Method	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	g/cm³	0.918	g/cm³
Film Properties¹					
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 Strengh					
MD	ASTM D882	36.5	Мра	5300	psi
TD	ASTM D882	26.9	Мра	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	%
Gloss 45°	ASTM D523	72		72	
Haze	ASTM D1003	9.3	%	9.3	%

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

Effective 6/2020 1/2

<sup>&</sup>lt;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.

The technical information, suggested uses and applications presented are made without charge and are believed to be reliable; however, ICD America LLC disclaims responsibility for reliance and results of use of this information. ICD AMERICA LLC DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE PRODUCT(S) DESCRIBED HEREINABOVE, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ICD America LLC expressly disclaims any statements or suggestions as being inducement. All users should rely upon their own knowledge and testing in determining product suitability.

Effective 6/2020 2/2