

ICELENE LL4119

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 (7000 ppm)
CC Slip (1350 ppm), Antiblock (7000 ppm)

PRODUCT DESCRIPTION

ICELENE LL4119 is a certified prime resin intended for use in film extrusion applications that require excellent drawdown and toughness. These resins have excellent puncture resistance, elongation and heat seal strength. Typical applications include heavy duty shipping sacks, trash can liners, commercial and industrial packaging, as well as food and consumer packaging. LL4119 is available without additives or fully formulated with slip and antiblock additives. LL4119 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. Specific limitations or conditions of use may apply.

Properties*	Test Method	Metric Units		English	
		Typical Value	Unit	Typical Value	Unit
Melt Flow Index ²	ASTM D1238	1.0	g/10 min.	1.0	g/10 min
Density (23°C)	ASTM D792	0.918	g/cm ³	0.918	g/cm ³
Vicat Softening Point	ASTM D1525	107	°C	225	°F
Film Properties¹					
Haze	ASTM D1003	20	%	20	%
Gloss 45°	ASTM D523	40		40	
Dart Drop Impact Strength F50	ASTM D1709/A	100	g	100	g
Tensile Strength at Break					
MD	ASTM D882	45.5	Mpa	6600	psi
TD	ASTM D882	32.4	Mpa	4700	psi
1% Secant Modulus					
MD	ASTM D638	186	MPa	27000	psi
TD	ASTM D638	193	MPa	28000	psi
Elmendorf Tear					
MD	ASTM D1922	125	g	125	g
TD	ASTM D1922	330	g	330	g
Elongation					
MD	ASTM D882	580	%	580	%
TD	ASTM D882	725	%	725	%

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

¹ 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 operating Conditions.

² 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.