

ICELENE LLF-4118

Butene Copolymer LLDPE Film Resins

Grade	Additive packages	Applications
ICELENE LLF-4118D	Slip (1500 ppm), Antiblock (6300 ppm)	Trash bags, garment film, bags-on-roll
ICELENE LLF-4118F	Slip (0 ppm), Antiblock(0 ppm)	

PRODUCT DESCRIPTION

ICELENE LLF-4118 is a certified prime resin intended for use in trash bags, garment film, bags-on-roll. ICELENE LLF-4118 Series 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 (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
Film Properties¹					
Thickness		25	µm	1.0	mil
Tear Strength					
MD	ASTM D1992	100	g	100	g
TD	ASTM D1992	330	g	330	g
Low Friction Puncture		34	J/mm	8	in-lb/mil
Dart Drop Impact Strength F50	ASTM D1709/A	100	g	100	g
Tensile Strength					
MD	ASTM D882	49	Mpa	7100	psi
TD	ASTM D882	34	Mpa	4900	psi
Yield Strength					
MD	ASTM D882	11	MPa	1600	psi
TD	ASTM D882	11	MPa	1600	psi
Elongation					
MD	ASTM D882	540	%	540	%
TD	ASTM D882	830	%	830	%
1 % Secant Modulus					
MD	ASTM D882	200	MPa	29000	psi
TD	ASTM D882	230	MPa	33400	psi
Haze	ASTM D1003	11	%	11	%
Gloss @ 45°	ASTM 2457	56		56	

* 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 2 Condition 190°C/2.16 kg.

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