

# polyethylene

## NOVAPOL® LF-Y819 Series Resin

### Homopolymer LDPE Film Resins



product data sheet

Grades	Additive Packages	Applications
LF-Y819-A	Base resin	Industrial packaging, liners, shrink film, blends with LLDPE, small diameter pipe and tubing
LF-Y819-C	Antiblock (3500 ppm)	Industrial packaging, liners, shrink film, blends with LLDPE

Property	ASTM (1)	Typical Values(2) for LF-Y819-A
Melt Index(3)	D 1238	0.75 g/10 min
Density	D 792	0.919 g/cm <sup>3</sup>
		METRIC UNITS      ENGLISH UNITS

**Melt Index 0.75**

**Density 0.919**

#### Film Properties(4)

Thickness		38 µm	1.5 mil
Tear Strength	MD D 1922	176 g	
	TD	130 g	
Dart Drop Impact, F <sub>50</sub>	D 1709/A	160 g	
Low Friction Puncture(5)		21 J/mm	5 in-lb/mil
Tensile Strength	MD D 882	29 MPa	4,200 psi
	TD	21 MPa	3,000 psi
Yield Strength	MD D 882	13 MPa	1,900 psi
	TD	10 MPa	1,500 psi
Elongation	MD D 882	170 %	170 %
	TD	490 %	490 %
1% Secant Modulus	MD D 882	180 MPa	26,100 psi
	TD	225 MPa	32,600 psi
Haze	D 1003	19 %	19 %
Gloss @ 45°	D 2457	30	30

#### Features

- Good strength and toughness
- Excellent shrink film characteristics
- Excellent processability

(1) Properties designated have been determined using methods which are in accordance with, or substantially in accordance with, the specified testing standards.

(2) Typical Values represent average laboratory values and are intended as guides only, not as specifications.

(3) Condition 190°C/2.16 kg.

(4) Film properties are typical of blown film extruded on a 1.5" extruder with 3" die and 35-mil die gap at a blow up ratio of 2.5:1, but are dependent upon operating conditions.

(5) NOVA Chemicals test method.

## PRODUCT DATA SHEET

# NOVAPOL LF-Y819 Series Resin

## Homopolymer LDPE Film Resins

### Availability

NOVAPOL LF-Y819 Series polyethylene resins are available in bulk hopper cars, hopper trucks, boxes, sea bulk containers, or bags. The product type and batch number are clearly marked on each container. Contact the NOVA Chemicals sales office nearest you for availability in your area.

### Storage/Handling

NOVAPOL LF-Y819 Series resin should be stored in a clean, dry place at ambient temperatures. Prolonged or improper storage can result in deterioration of product properties. Care should be taken when handling and transferring product to prevent foreign matter contamination. The NOVA Chemicals Material Safety Data Sheet (MSDS) contains important safety information and should be reviewed before using the product.

### Processing Conditions

Comprehensive assistance with processing conditions and technology is available from NOVA Chemicals Technical Service at (403) 291-8444.

### Food Packaging Status

United States: NOVAPOL LF-Y819 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) 2.1, and may thus be used in the United States as an article or component of an article intended for use in contact with food. This resin is subject to the specific limitation that it may not be used in articles used for packing or holding food during cooking.

Other Countries: For regulatory compliance information for other countries, please contact your nearest NOVA Chemicals office.

### Environmental

NOVA Chemicals polyethylene resins are biologically and chemically inert, but improper disposal may present an ingestion hazard to wildlife. Where recycling of NOVA Chemicals' polyethylene resins is not possible, disposal to landfill or incineration in accordance with all applicable government laws and regulations is recommended. Please contact NOVA Chemicals Technical Service for further information on recycling and disposal of NOVA Chemicals resins.



4 is the SPI resin code developed for low density and linear low density polyethylene to identify material type for sorting and recycling purposes.

 NOVA Chemicals® is a registered trademark of NOVA Brands Ltd.; authorized use/utilisation autorisée.  
NOVAPOL® is a registered trademark of NOVA Brands Ltd.; authorized use/utilisation autorisée.

August 12, 2013