

### Grades

- LF-Y320-C
- LF-Y320-D

### Additive Packages

- Antiblock only
- Low slip and high antiblock

### Applications

- Industrial packaging, liners, shrink film, blends with LLDPE
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## LF-Y320 Series

**Melt Index** 0.25

**Density** 0.921

### Features

- High melt strength and superior bubble stability
- Enhances throughputs in LLDPE blends
- Superior strength and toughness
- Excellent shrink film characteristics

### Common Additives

- Antiblock

Properties		ASTM <sup>(1)</sup>	Units	Typical Values <sup>(2)</sup> for LF-Y320-C
<b>Melt Index<sup>(3)</sup></b>		D 1238	g/10 min	0.25
<b>Density</b>		D 792	g/cm <sup>3</sup>	0.921
<b>Film Properties<sup>(4)</sup></b>				
<b>Thickness</b>			µm (mil)	38 (1.5)
<b>Tear Strength</b>	MD	D 1922	g	320
	TD		g	120
<b>Dart Drop Impact, F<sub>50</sub></b>		D 1709/A	g	160
<b>Low Friction Puncture<sup>(5)</sup></b>			J/mm (in-lb/mil)	9 (2)
<b>Tensile Strength</b>	MD	D 882	MPa (psi)	30 (4 350)
	TD		MPa (psi)	21 (3 050)
<b>Yield Strength</b>	MD	D 882	MPa (psi)	16 (2 320)
	TD		MPa (psi)	10 (1 450)
<b>Elongation</b>	MD	D 882	%	110
	TD		%	450
<b>1% Secant Modulus</b>	MD	D 882	MPa (psi)	190 (27 500)
	TD		MPa (psi)	230 (33 000)
<b>Haze</b>		D 1003	%	30
<b>Gloss @ 45°</b>		D 2457		20

(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 dependant upon operating conditions.

(5) NOVA Chemicals test method.

## LF-Y320 Series – LDPE

## NOVAPOL

**Availability**

NOVAPOL 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**

LF-Y320 Series resins 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****Recommended Conditions:**

<b>Melt Temperature</b>	170°C - 190°C 340°F - 375°F
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<b>Optimum Blow-up Ratio</b>	2:1 - 3:1
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<b>Film thickness</b>	2.0 mil (50 µm) or greater
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Comprehensive assistance with processing conditions and technology is available from NOVA Chemicals Technical Service at (403) 291-8444.

**Food Packaging Status**

**United States:** LF-Y320-C and LF-Y320-D comply 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. LF-Y320-C and LF-Y320-D are subject to the specific limitation that they 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.



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

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