

### Grades

- FP120-A
- FP120-B
- FP120-C
- FP120-D
- FP120-F

### Additive Packages

- Process stabilizer only
- Slip, antiblock
- Polymer process aid
- Slip, antiblock, polymer process aid
- Antiblock, polymer process aid

### Applications

- General purpose film, coextrusion and lamination
- General purpose film, coextrusion and lamination
- Food packaging, freezer film, lamination and sealant film
- Food packaging, freezer film, lamination and sealant film
- Heavy duty shipping sacks, high strength packaging

## FP120 Series

**Melt Index** 1.0

**Density** 0.920

### Features

- Easy processability
- High toughness and strength
- Excellent seal properties

### Common Additives

- Process stabilizer

Properties		ASTM <sup>(1)</sup>	Units	Typical Values <sup>(2)</sup> for FP120-D
<b>Melt Index<sup>(3)</sup></b>		D 1238	g/10 min	1.0
<b>Density</b>		D 792	g/cm <sup>3</sup>	0.920
<b>Film Properties<sup>(4)</sup></b>				
<b>Thickness</b>			µm (mil)	25 (1.0)
<b>Tear Strength</b>	MD	D 1922	g	420
	TD		g	605
<b>Dart Drop Impact, F<sub>50</sub></b>		D 1709/A	g	270
<b>Low Friction Puncture<sup>(5)</sup></b>			J/mm (in-lb/mil)	36 (8)
<b>Tensile Strength</b>	MD	D 882	MPa (psi)	48 (6 960)
	TD		MPa (psi)	32 (4 640)
<b>Yield Strength</b>	MD	D 882	MPa (psi)	10 (1 450)
	TD		MPa (psi)	10 (1 450)
<b>Elongation</b>	MD	D 882	%	480
	TD		%	670
<b>1% Secant Modulus</b>	MD	D 882	MPa (psi)	175 (25 375)
	TD		MPa (psi)	195 (28 275)
<b>Haze</b>		D 1003	%	10
<b>Gloss @ 45°</b>		D 2457	--	59

(1) Properties designated have been determined in accordance with the current issues of the specified testing methods. Methods of the American Society for Testing and Materials (ASTM) are used wherever applicable.

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

(3) Condition 190/2.16.

(4) Film properties are typical of blown film extruded at a blowup ratio of 2.5:1 and a die gap of 35-mil, but are dependent upon operating conditions.

(5) NOVA Chemicals test method.

## FP120 Series – LLDPE

## SCLAIR

**Availability**

**SCLAIR 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**

FP120 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>	210°C - 230°C 410°F - 446°F
<b>Optimum Blow-up Ratio</b>	2:1 - 3:1
<b>Die Gap with PPA</b>	0.9 mm - 2.0 mm 0.035 in - 0.080 in
<b>Die Gap without PPA</b>	2.0 mm - 2.5 mm 0.08 in - 0.10 in
<b>Film Thickness</b>	1.0 mil - 6.0 mil 25 µm - 150 µm

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

**Food Packaging Status**

**United States:** FP120-A, FP120-B, FP120-C, FP120-D, and FP120-F comply 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.

**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.

[www.novachemicals.com](http://www.novachemicals.com)

**U.S. Operating Center**

**NOVA Chemicals Inc.**  
1550 Coraopolis Heights Road  
Moon Township, PA 15108  
United States of America

Phone 412.490.4000  
Toll Free 800.222.7213  
Fax 412.494.4861

**Canadian Sales Office**

**NOVA Chemicals Corporation**  
Suite 200  
6711 Mississauga, Ontario  
Canada L5N 2W3

Phone 905.542.3338  
Toll Free 800.268.2507  
Fax 905.542.8075

**European Operating Center**

**NOVA Chemicals (International) S.A.**  
Avenue de la Gare 14  
1700 Fribourg  
Switzerland

Phone 41.26.426.57.57  
Fax 41.26.426.57.70

**Technical Center**

**NOVA Chemicals Technical Center**  
3620 – 32 Street N.E.  
Calgary, Alberta  
Canada T1Y 6G7

Phone 403.291.8444  
Fax 403.291.0493

**Headquarters**

**NOVA Chemicals Corporation**  
1000 Seventh Avenue S.W.  
P.O. Box 2518, Station M  
Calgary, Alberta  
Canada T2P 5C6

Phone 403.750.3600  
Fax 403.269.7410

 **NOVA Chemicals**® is a registered trademark of NOVA Brands Ltd; authorized use.

**SCLAIR**® is a registered trademark of NOVA Chemicals Corporation in Canada and of NOVA Chemicals (International) S.A. elsewhere; authorized use.

The above information is provided in good faith. NOVA Chemicals is not responsible for any processing or compounding which may occur to produce finished articles, packaging materials or their components. Further, NOVA CHEMICALS MAKES NO WARRANTY OR REPRESENTATION OF ANY KIND, REGARDING THE INFORMATION GIVEN OR THE PRODUCTS DESCRIBED, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, REPRESENTATIONS AND CONDITIONS, INCLUDING WITHOUT LIMITATION ALL WARRANTIES AND CONDITIONS OF QUALITY, MERCHANTABILITY AND SUITABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Responsibility for use, storage, handling and disposal of the products described herein is that of the purchaser or end user.