


Product Data Sheet

NOVAPOL® PF-Y821 Series Resin

Butene Copolymer LLDPE Film Resins

Grades

PF-Y821-BP02

PF-Y821-CP02

PF-Y821-D

PF-Y821-F

Additive Packages

Slip (1050 ppm), AB (3050 ppm), non-fluorinated PPA

AB (2500 PPM), non-fluorinated PPA

Slip (1700 ppm), AB (4250 ppm)

Processing antioxidant

Applications

General purpose packaging, bags requiring moderate clarity, bread bags

Industrial packaging, heavy duty sacks

General purpose packaging

General purpose packaging

AB = antiblock, PPA = polymer process aid

Property	ASTM ⁽¹⁾	Typical Values ⁽²⁾ for PF-Y821-CP02
Melt Index ⁽³⁾	D 1238	0.8 g/10 min
Density	D 792	0.921 g/cm ³

Melt Index 0.8
Density 0.921

Film Properties⁽⁴⁾

		METRIC UNITS	ENGLISH UNITS
Thickness		25 µm	1.0 mil
Tear Strength	MD D 1922	100 g	
	TD	400 g	
Dart Drop Impact, F ₅₀	D 1709/A	110 g	
Low Friction Puncture ⁽⁵⁾		32 J/mm	7 in-lb/mil
Tensile Strength	MD D 882	45 MPa	6,500 psi
	TD	33 MPa	4,800 psi
Yield Strength	MD D 882	10 MPa	1,500 psi
	TD	11 MPa	1,600 psi
Elongation	MD D 882	610 %	
	TD	870 %	
1% Secant Modulus	MD D 882	210 MPa	30,500 psi
	TD	230 MPa	33,400 psi
Haze	D 1003	12 %	
Gloss @ 45°	D 2457	57	

Features

- Good stiffness and machinability

Common Additives

- Processing antioxidant

(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 2.5" extruder with 4" 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.



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Availability

NOVAPOL PF-Y821 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 PF-Y821 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 Safety Data Sheet (SDS) 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 PF-Y821 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, except for infant formula and human milk, under Conditions of Use A–H (21 CFR 176.170(c) Table 2).

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.



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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