


Product Data Sheet

SURPASS® SPs116 Series Resin

Octene Copolymer LLDPE Film Resins

Grades

 SPs116-C
 SPs116-D

Additive Packages

 Non-fluorinated PPA
 Slip (1000 ppm), AB (2500 ppm), Non-fluorinated PPA

Applications

 Lamination film, co-extruded sealant layer, liquid packaging
 Lamination film, co-extruded sealant layer

PPA = polymer process aid, AB = antiblock

Property	ASTM ⁽¹⁾	Typical Values ⁽²⁾ for SPs116-C	
Melt Index ⁽³⁾	D 1238	1.0 g/10 min	
Density	D 792	0.916 g/cm ³	
		METRIC UNITS	ENGLISH UNITS
Film Properties⁽⁴⁾			
Thickness		25 µm	1.0 mil
Tear Strength	MD D 1922	270 g	
	TD	541 g	
Dart Drop Impact, F ₅₀	D 1709/A	695 g	
Low Friction Puncture ⁽⁵⁾		105 J/mm	24 in-lb/mil
Tensile Strength	MD D 882	35.2 MPa	5,100 psi
	TD	51.6 MPa	7,500 psi
Yield Strength	MD D 882	8.4 MPa	1,200 psi
	TD	8.6 MPa	1,200 psi
Elongation	MD D 882	500 %	
	TD	870 %	
1% Secant Modulus	MD D 882	160 MPa	23,200 psi
	TD	165 MPa	23,900 psi

Melt Index 1.0
Density 0.916
Features

- Excellent seal properties
- Superior toughness with excellent tear strength
- Excellent optics
- Next generation non-fluorinated PPA

Common Additives

- Processing antioxidant
- Non-fluorinated PPA

- (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.
- (6) The seal initiation temperature is the temperature at which a 2-mil film achieves a seal strength of 8.8N/25.4mm.
- (7) Tested at 0.5s dwell, 0.27 N/mm² bar pressure, 305 mm/min pull speed.



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Availability

SURPASS SPs116 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

SURPASS SPs116 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: SURPASS SPs116 Series resin complies with the specifications contained in the 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 ≤ 6 mil (152 μ m) thick 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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