NOVA Chemicals
Polyethylene

Product Data Sheet

# SCLAIR® 17A Resin

## Butene Copolymer HDPE Film Resin

| Property | | ASTM (1) | Typical Values (2) | | | |
|---|---|---|---|---|---|---|
| Melt Index(3) | | D 1238 | 0.45 | g/10 min | | |
| Density | | D 792 | 0.950 | g/cm³ | | |
| Hardness, Shore D | | D 2240 | 67 | | | |
| | | | METRIC UNITS | | ENGLISH UNITS | |
| Vicat Softening Point | | D 1525 | 125 | °C | 257 | °F |
| **Film Properties(4)** | | | | | | |
| Thickness | | | 38 | µm | 1.5 | mil |
| Tear Strength | MD | D 1922 | 22 | g | | |
| | TD | | 875 | g | | |
| Dart Drop Impact, $F_{50}$ | | D 1709/A | 40 | g | | |
| Low Friction Puncture(5) | | | 23 | J/mm | 5.2 | in-lb/mil |
| Tensile Strength | MD | D 882 | 45 | MPa | 6,500 | psi |
| | TD | | 20 | MPa | 2,900 | psi |
| Yield Strength | MD | D 882 | 22 | MPa | 3,200 | psi |
| | TD | | 20 | MPa | 2,900 | psi |
| Elongation | MD | D 882 | 650 | % | 650 | % |
| | TD | | 750 | % | 750 | % |
| 1% Secant Modulus | MD | D 882 | 630 | MPa | 91,400 | psi |
| | TD | | 900 | MPa | 130,500 | psi |
| Coefficient of Friction | | D 1894 | 0.24 | | 0.24 | |
| OTR(6) | | D 3985 | 1,920 | cm³/m²/day | 124 | cm³/100in²/day |
| MVTR(7) | | F 1249 | 4.0 | g/m²/day | 0.26 | g/100 in²/day |

(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) Properties measured from film produced on a laboratory extruder with 4" die, 35-mil die gap, 3.5:1 blow up ratio, and melt temperature of 213°C.

(5) NOVA Chemicals test method.

(6) Oxygen Transmission Rate, 23°C (74°F), 0% RH, atmospheric pressure.

(7) Moisture Vapour Transmission Rate, 38°C (100°F), 100% RH, atmospheric pressure.

| | |
|---|---|
| Melt Index | 0.45 |
| Density | 0.950 |
| Slip | None |
| Antiblock | None |

### Features

- Low gel
- Good processability

### Additives

- Processing antioxidant

### Applications

- Co-extrusion
- Blending

Product Data Sheet

NOVA Chemicals Polyethylene

# SCLAIR 17A Resin

## Butene Copolymer HDPE Film Resin

### Availability

SCLAIR 17A 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

SCLAIR 17A 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: SCLAIR 17A 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, without temperature or food-type restrictions, subject to technical suitability.

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 high density polyethylene to identify material type for sorting and recycling purposes.

The NOVA Chemicals logo is a registered trademark of NOVA Brands Ltd.; authorized use/utilisation autorisée.
SCLAIR® is a registered trademark of NOVA Chemicals Corporation in Canada and of NOVA Chemicals (International) S.A. elsewhere; authorized use/utilisation autorisée.

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 FOR 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.

August 21, 2017