


Product Data Sheet

SURPASS® RMs245-U(UG) Resin

Octene Copolymer HDPE Rotational Molding Resin



Property	ASTM ⁽¹⁾		Typical Values ⁽²⁾	
Melt Index	⁽³⁾ D 1238	1.7 g/10 min		
Density	D 792	0.945 g/cm³		
		METRIC UNITS		ENGLISH UNITS
Melting Point (DSC)		127 °C		261 °F
Flexural Modulus	⁽⁴⁾ D 790	1,030 MPa	149,400 psi	
Yield Strength	⁽⁵⁾ D 638	23 MPa	3,300 psi	
Elongation at Yield	⁽⁵⁾ D 638	11 %	11 %	
ESCR, (F ₅₀)	⁽⁶⁾ D 1693	> 1 000 h		
Heat Distortion Temperature				
- 66 psi (4.64 kg/cm²)	D 648	63 °C	145 °F	
- 264 psi (18.56 kg/cm²)	D 648	43 °C	109 °F	
ARM Low Temperature Impact	⁽⁷⁾			
- 0.125" (3.17 mm)	ARM Method	75 J	55 ft-lb	
- 0.250" (6.35 mm)	ARM Method	> 245 J	> 180 ft-lb	

(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) 1% Strain Value. From compression molded samples.

(5) Type IV specimen, 2" (50.8 mm) per minute test speed, 0.075" (1.9 mm) thickness compression molded samples.

(6) Condition A & B, 100% IGEPAL, 50°C, F50 values. From compression molded specimens.

(7) -40°C on rotomolded samples.

Melt Index 1.7
Density 0.945

Features

- Exceptional low temperature impact properties
- Broad processing window
- High stiffness for very large tanks, combined with exceptional ESCR performance
- Superior whiteness for improved part appearance, resistant to gas fading
- NSF listed for Standards #24, 51, 61
- Broad application use and potential for resin consolidation
- Good interior finish on large tanks
- UL 94 HB
- HDB rating 1600 psi

Additives

- Processing antioxidant
- UV stabilizers (>UV 22)

Applications

- Septic tanks
- Very large tanks (up to 20,000 gallons)
- Agricultural tanks as small as 3,000 gallons

**Product Data Sheet**

SURPASS RMs245-U(UG) Resin

Octene Copolymer HDPE Rotational Molding Resin

Availability

SURPASS RMs245-U(UG) 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 RMs245-U(UG) 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 RMs245-U(UG) 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. This resin is subject to the specific limitation that it may contact food only at temperatures of 212°F and below (21 CFR 176.170(c) Table 2, conditions of use B–H).

Other Countries: For regulatory compliance information for other countries, please contact your nearest NOVA Chemicals office.

SURPASS RMs245-U(UG) resin conforms to NSF/ANSI/CAN Standards #24, #51, and #61. In addition:

- the production facility is audited annually to assure that only authorized materials are used in the product;
- quality assurance and quality control procedures are followed in fabrication, and all the requirements of the standard continue to be met;
- products are sampled and retested on schedule; and
- labeling and product literature are true and accurate with respect to the NSF listed products.

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.



SURPASS RMs245-U(UG) conforms to NSF/ANSI/CAN Standards 24, 51 and 61.

The NOVA Chemicals logo is a registered trademark of NOVA Brands Ltd.; authorized use/utilisation autorisée.

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

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.

October 26, 2022