NOVA Chemicals
Polyethylene

Product Data Sheet

NOVAPOL® TRx0535-U(UG) Resin

Hexene Copolymer MDPE Rotational Molding Resin

NSF Certified to NSF/ANSI 51 & NSF/ANSI/CAN 61

Property	ASTM (1)	Typical Values(2)			
Melt Index	(3) D 1238	5.0 g/10 min			
Density	D 792	0.935 g/cm³			
		METRIC UNITS		ENGLISH UNITS	
Melting Point (DSC)		125	°C	257	°F
Flexural Modulus	(4) D 790	680	MPa	98,600	psi
Yield Strength	(5) D 638	17.5	MPa	2,500	psi
Elongation at Yield	(5) D 638	12	%	12	%
ESCR, (F_{50})	(6) D 1693	> 1 000	h		
Heat Distortion Temperature					
- 66 psi (4.64 kg/cm²)	D 648	58	°C	136	°F
- 264 psi (18.56 kg/cm²)	D 648	42	°C	108	°F
ARM Low Temperature Impact	(7)				
- 0.125" (3.17 mm)	ARM Method	66	J	49	ft-lb
- 0.250" (6.35 mm)	ARM Method	238	J	176	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	5.0
Density	0.935

Features

- Faster cycle time
- Broadened process window
- Excellent low temperature impact properties
- Excellent ESCR
- Long cook time impact retention
- NSF listed for Standards #24, 51, 61
- UL 94 HB

Additives

- Processing antioxidant
- UV stabilizer (UV 20)

Applications

- IBCs
- Toys
- General purpose custom molding
- Agricultural storage tanks
- Marine parts

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Availability

NOVAPOL TRx0535-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

NOVAPOL TRx0535-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: NOVAPOL TRx0535-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 limitations 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), and that finished articles must have a volume greater than 5 gal. U.S. (18.9 L) when contacting fatty foods (21 CFR 176.170(c), Table 1, food types III, IV-A, V, VII-A and IX).

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

NOVAPOL TRx0535-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.

4 LDPE is the SPI resin code developed for low density and linear low density polyethylene to identify material type for sorting and recycling purposes.

NSF Certified to NSF/ANSI 51 & NSF/ANSI/CAN 61 — NOVAPOL TRx0535-U(UG) conforms to NSF/ANSI/CAN Standards 24, 51 and 61.

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