

HB-W646-U

HLMI 6.0

Density 0.946

Properties	ASTM ⁽¹⁾	Units	Typical Values ⁽²⁾
High Load Melt Index (HLMI)⁽³⁾	D 1238	g/10 min	6.0
Density	D 792	g/cm ³	0.946
Molded Plaque Properties			
Tensile Strength @ Yield	D 638	MPa (psi)	24 (3 480)
Elongation @ Break	D 638	%	840
Flexural Modulus	D 790	MPa (psi)	1 100 (159 540)
ESCR, F₅₀⁽⁴⁾	D 1693	hr	> 1 000
ESCR, F₅₀⁽⁵⁾	D 1693	hr	> 1 000
Brittleness Temperature⁽⁶⁾	D 746	°C (°F)	< -70 (< -94)
Izod Impact Resistance⁽⁷⁾	D 256	J/cm (ft-lb/in)	4.0 (8.0)

Features

- High molecular weight HDPE
- Excellent ESCR
- Good chemical resistance
- Outstanding processibility
- High impact strength
- Outstanding colour of molded parts

Additives

- Process stabilizer
- UV stabilizer

Applications

- Intermediate Bulk Containers (IBCs)
- Agricultural Tanks/Containers
- Shipping Containers/Drums
- Marine Fuel Tanks
- Jerry Cans

(1) Properties designated have been determined in accordance with the current issues of the specified testing methods. Methods of the American Society for Testing and Materials (ASTM) are used wherever applicable.

(2) Typical Values represent average laboratory values and are intended as guides only, not as specifications.

(3) Condition 190/21.6.

(4) Environmental stress crack resistance, Condition A, 100% Igepal.

(5) Environmental stress crack resistance, Condition B, 100% Igepal.

(6) F₅₀, notched specimen.

(7) 3.2 mm (0.125 in) thick specimen.

HB-W646-U – HDPE

NOVAPOL

Availability

NOVAPOL 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

HB-W646-U 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 Material Safety Data Sheet (MSDS) contains important safety information and should be reviewed before using the product.

Processing Conditions

The recommended melt temperature for HB-W646-U is 180°C-220°C (355°F-430°F). This resin can be blow molded on most commercial blow molding machines. Comprehensive assistance with processing conditions and technology is available from NOVA Chemicals Technical Service at (403) 291-8444.

Food Packaging Status

United States: HB-W646-U 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.



HDPE is the SPI resin code developed for high density polyethylene to identify material type for sorting and recycling purposes.

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