



# UNIVAL DMDH-6400 NT 7

## High Density Polyethylene Resin

- Maximum rigidity
- High impact strength
- Top load strength
- Moderate swell
- Complies with U.S. FDA 21 CFR 177.1520 (c) 2.2  
Consult the regulations for complete details.

UNIVAL™ DMDH-6400 NT 7 High Density Polyethylene (HDPE) Resin is a multi-purpose polymer designed for producing containers used to package dairy, water and fruit drinks. In addition, it can be blow molded into other thin-walled parts and houseware items.

Physical Properties	Test Method	Values <sup>(1)</sup> English (SI)
<b>Resin Properties</b>		
Flow Rate (I <sub>21</sub> ) @ 190°C/21.60 kg, g/10 min	ASTM D 1238	57
Melt Index (I <sub>2</sub> ) @ 190°C/2.16 kg, g/10 min	ASTM D 1238	0.80
Density, g/ cm <sup>3</sup>	ASTM D 792	0.961
DSC Melting Point, °F (°C)	Dow Method	271 (133)
DSC Crystallization Point, °F (°C)	Dow Method	248 (120)
Vicat Softening Point, °F (°C)	ASTM D 1525	268 (131)
<b>Molded Plaque Properties<sup>(2)</sup></b>		
Hardness, Shore D	ASTM D 2240	66
Flexural Modulus, 2% Secant, psi (MPa)	ASTM D 790 B	188,000 (1296)
Tensile Strength at Break, psi (MPa)	ASTM D 638	3500 (24)
Tensile Strength at Yield, psi (MPa)	ASTM D 638	4600 (32)
Tensile Elongation at Break, %	ASTM D 638	1000
Tensile Elongation at Yield, %	ASTM D 638	7
Tensile Impact Strength, ft·lb/in. <sup>2</sup> (kJ/m <sup>2</sup> )	ASTM D 1822, Type S	40 (84)
Environmental Stress Crack Resistance, 122°F (50°C), F <sub>50</sub> , 100% Igepal®, hrs.	ASTM D 1693	20
Brittleness Temperature, °F (°C)	ASTM D 746	<-105 (<-76)
Deflection Temperature Under Load @ 66 psi (0.45 MPa), °F (°C)	ASTM D 648	169 (76)

- (1) Typical values, not to be construed as specifications. Users should confirm results by their own tests.  
 (2) Molded and tested in accordance with ASTM D4976.

## Handling Considerations

Material Safety Data (MSD) sheets for the product are available from Dow Plastics, a business group of The Dow Chemical Company and its subsidiaries, to help customers further satisfy their own safe handling and disposal needs and those that may be required by OSHA. Material Safety Data sheets on Dow products are intended to provide customers with essential information on such topics as Health and Worker Safety, Combustibility, and Disposal Considerations. Such information should be requested from the supplier(s) of any product(s) prior to working with it. As various additives and processing aids used in fabrication have their own safe use profile, their possible influence on handling and disposal must be investigated separately. For "Regulated" uses, such as food contact, your Dow sales representative can obtain compliance letters for specific resins.

### Disposal

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/provincial, and local laws and regulations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

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As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess, or manage chemicals or plastics, and that manage used drums. For more details, contact The Dow Chemical Company Customer Information Center at 1-800-441-4369. In Mexico, call 95-800-441-4369.

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Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to help ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel will assist customers in dealing with ecological and product safety considerations. Dow product literature, including MSD sheets, should be consulted prior to use of Dow products. Your Dow Plastics sales representative can arrange the proper contacts, or write to Dow Plastics.

### Additional Information

For more information in the United States or Canada, call 1-800-441-4369. In Mexico, call 95-800-441-4369.

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