

DOWLEX IP 40

Polyethylene Resin

- For food container applications
- Excellent processability and impact resistance
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a.
Consult the regulations for complete details.

DOWLEX* IP 40 Polyethylene Resin is an Improved Processing high density resin designed to offer the excellent processing and impact

resistance required for food container applications. This resin was designed by optimizing the breadth, shape and peak molecular weight, and has

demonstrated both excellent impact and processability over a wide range of conditions.

Physical Properties	Test Method	Values ⁽¹⁾ English (SI)
Resin Properties		
Melt Index, g/10 min	ASTM D 1238	40
Density, g/cc	ASTM D 792	0.9520
DSC Melting Point, °F (°C)	Dow Method	262 (128)
Vicat Softening Point, °F (°C)	ASTM D 1525	250 (121)
Molded Part Properties⁽²⁾		
Tensile Yield ⁽³⁾ , psi (MPa)	ASTM D 638	2900 (20)
Ultimate Tensile ⁽³⁾ , psi (MPa)	ASTM D 638	1600 (11)
Ultimate Elongation ⁽³⁾ , %	ASTM D 638	250
Notched Izod Impact	ASTM D 256	
@ -50°C, ft·lbf/in. (J/cm)		0.9 (49)
@ 23°C, ft·lbf/in. (J/cm)		0.4 (21)
Flexural Modulus, psi (MPa)	ASTM D 790	132,000 (910)
Tensile Modulus, 2% Secant, psi (MPa)	ASTM D 790	89,000 (614)

Fabrication Conditions For Injection Molding:

- Molded using DEMAG 150
- Barrel Temperature⁽⁴⁾: 374°F (190°C)
- Chill Water Temperature: 55°F (13°C)
- Cycle Time: 20 seconds
- Fill Time: 1 second
- Hold Time: 5 seconds

- (1) Typical values, not to be construed as specifications. Users should confirm results by their own tests.
- (2) Testing performed on injection molded ASTM test specimens (0.125 in.). Properties will vary with changes in molding conditions.
- (3) Crosshead speed 2.0 in./min.
- (4) Recommend do not exceed 550°F (288°C) barrel temperature.

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.

THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients). FOR UNUSED AND UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device, and landfill. These polymers have high heat values and should be incinerated only in units designed to handle high heats of combustion. In landfill, these polymers are inert, do not degrade quickly, form a strong and permanent soil base, and evolve virtually no gases or leachates known to pollute water resources.

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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Customer Notice

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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