



TOUGH, RELIABLE SOLUTIONS FOR
INJECTION
MOLDING APPLICATIONS



YOUR ONE-STOP SHOP

FOR INJECTION MOLDING SOLUTIONS



As the world's top producer of polyethylene, The Dow Chemical Company (Dow) is uniquely qualified to meet your needs for injection molding solutions. Our product portfolio covers everything from industry standards to the latest breakthroughs – all backed by a singular understanding of material science and processing, plus global manufacturing capabilities. By working closely with customers and other key members of the value chain, Dow helps drive innovation and promote sustainability in applications such as:

- Caps & Closures (C&C)
- Industrial Containers
- Thin-wall Containers (TWC)
- Lids

The following pages provide an overview of Dow plastic resins designed for use in injection molded rigid packaging applications:

- **EVERCAP™ Innovative Closure Resins** offer unmatched performance and processability for virtually any cap, closure, or fitment application. This versatile range of polyethylene (PE) solutions enables the differentiation required to address mega trends and other key needs (see Table 4, page 4) while also creating opportunities for collaborative, accelerated innovation.

- **CONTINUUM™ Bimodal Polyethylene Resins** offer opportunities for enhanced closure performance and increased competitive advantage with the potential for lightweighting, incorporation of post-consumer recycle (PCR) content, and more.
- **DOW HEALTH+™ Polyethylene Resins** deliver the high levels of quality, compliance, and commitment needed to meet the stringent requirements of healthcare and pharmaceutical applications.
- **DOW™ HDPE Resins** feature excellent flow, impact strength, rigidity, ESCR, and downgauging capabilities – plus low warpage and taste/odor contributions – making them a solid choice for injection molded and extruded/thermoformed applications like tubs, pails, and single-serve containers.
- **DOWLEX™ IP HDPE Resins** offer the high stiffness, impact resistance, and enhanced processing required for thin-wall injection molding (TWIM) applications.
- **DOW™ Linear Low Density Polyethylene (LLDPE) Resins** bring flexibility/durability, high gloss, low taste and odor, and downgauging capabilities to caps, closures, lids, and more.
- **DOWLEX™ LLDPE Resins** offer low temperature flexibility, good ESCR, and good processability under a wide range of molding conditions for lids and containers.
- **DOW™ LDPE Resins** offer excellent aesthetics, printability, and flexibility to lids, caps and closures, and other injection/compression molding applications.

If you don't see what you're looking for here, please contact your Dow representative, visit www.dowrigidpackaging.com, or call the nearest location on the back page.



TABLE 1: HIGH DENSITY POLYETHYLENE (HDPE) RESINS FOR INJECTION AND COMPRESSION MOLDING APPLICATIONS⁽¹⁾

RESIN NAME	PRODUCT DESCRIPTION; MARKET APPLICATION(S)	MELT INDEX ⁽²⁾ (I ₂), g/10 min.	DENSITY ⁽³⁾ , g/cc	TENSILE STRENGTH @ YIELD ⁽⁴⁾ , psi	2% SECANT FLEXURAL MODULUS ⁽⁵⁾ , psi	FDA COMPLIANCE – U.S. FDA 21 CFR 177.1520 (c) ⁽⁶⁾
HDPE RESINS – < 1.5 MELT INDEX						
EVERCAP™ DMDB-1220 NT 7 HDPE Innovative Closure Resin	Caps & Closures: Carbonated Soft Drinks (CSDs); Pressure Water; Alternative Beverages (Juices, Dairy, Teas, Nutritional Drinks)	0.3	0.958	3,600	170,000	3.2a
HDPE RESINS – 1.5 TO 10 MELT INDEX						
CONTINUUM™ DMDC-1250 NT 7 Bimodal Polyethylene Resin	Caps & Closures: CSDs; Pressure Water; Specialty Dispensing Units (higher ESCR)	1.5	0.955	3,500	164,000	3.2a
CONTINUUM™ DMDE-1250 NT 7 Bimodal Polyethylene Resin	Caps & Closures: CSDs; Pressure Water	1.5	0.955	4,100	160,000	3.2a
EVERCAP™ DMDF-1250 NT 7 HDPE Innovative Closure Resin	Caps & Closures: CSDs; Pressure Water; Alternative Beverages (Juices, Dairy, Teas, Nutritional Drinks)	1.5	0.955	4,100	160,000	3.2a
CONTINUUM™ DMDC-1270 NT 7 Bimodal Polyethylene Resin	Caps & Closures: CSDs; Pressure Water	2.5	0.955	3,900	157,000	3.2a
EVERCAP™ DMDA-1260 NT 7 HDPE Resin	Caps & Closures: Alternative Beverages (Juices, Dairy, Teas, Nutritional Drinks)	2.7	0.963	4,300	204,000	3.2a
DOW™ HDPE DMDA-8904 NT 7 Resin	General Purpose; UN Pails; Food & Beverage Packaging	4.4	0.952	3,900	160,000	3.1a
DOW™ HDPE DMDB-7950 NT 7 Resin	General Purpose; Trash Carts	5.8	0.948	3,600	146,000	3.1a
DOW™ HDPE DMDA-8907 NT 7 Resin	General Purpose; Pails; Food & Beverage Packaging	6.8	0.952	3,900	155,000	3.1a
DOW™ HDPE 08452N Resin	General Purpose; Pails	8.0	0.952	3,900	155,000	3.1a
DOW™ HDPE DMDA-8007 NT 7 Resin	General Purpose; Crates, Trays, Pallets; Food & Beverage Packaging	8.2	0.965	4,500	205,000	2.2
DOW™ HDPE DMDA-8910 NT 7 Resin	General Purpose	10	0.945	3,500	124,000	3.1a
DOW™ HDPE 10462N Resin	General Purpose, Crates	10	0.9625	4,400	178,000	3.1a
EVERCAP™ DMDC-1210 NT 7 HDPE Innovative Closure Resin	Caps & Closures: Still Water; Alternative Beverages (Juices, Dairy, Teas, Nutritional Drinks); Food Fitments/Dispensing Units	10	0.952	3,900	155,000	3.1a
EVERCAP™ DMDD-1210 NT 7 HDPE Innovative Closure Resin	Caps & Closures: Alternative Beverages (Juices, Dairy, Teas, Nutritional Drinks)	10	0.952	3,900	155,000	3.1a
EVERCAP™ DMDB-1230 NT 7 HDPE Innovative Closure Resin	Caps & Closures: Alternative Beverages (Juices, Dairy, Teas, Nutritional Drinks)	10	0.945	3,500	124,000	3.1a
HDPE RESINS – 17 TO 66 MELT INDEX						
DOW™ HDPE 17450N Resin	Caps & Closures: Food Fitments/Dispensing Units	17	0.950	2,700	125,000	3.2a
DOW™ HDPE DMDA-8920 NT 7 Resin	General Purpose; Caps & Closures; Food & Beverage Packaging	20	0.954	4,100	167,000	3.1a
DOW™ HDPE DMDA-8920 HEALTH+™ Resin ⁽⁷⁾	Caps & Closures: Pharmaceutical	20	0.954	4,100	167,000	3.1a
DOW™ HDPE DMDA-8933 NT 7 Resin	General Purpose; Containers & Pails	33	0.950	3,900	145,000	3.1a
DOWLEX™ IP-40 HDPE Resin	Thin-wall Injection Molding (TWIM); Food Containers	40	0.952	3,700	145,000	3.2a
DOWLEX™ IP-41 HDPE Resin	TWIM; High Stiffness	42	0.956	4,200	162,000	3.2a
DOW™ HDPE DMDA-8940 NT 7 Resin	TWIM; Food Containers, Cups, Caps & Closures	44	0.951	3,900	148,000	3.1a
DOW™ HDPE DMDA-8950 NT 7 Resin	TWIM; Freezer Grade Containers	50	0.942	3,000	83,500	3.1a
DOW™ HDPE DMDA-8962 NT 7 Resin	TWIM; Freezer Grade Containers	62	0.942	3,000	83,000	3.1a
DOW™ HDPE DMDA-8965 NT 7 Resin	TWIM; Food Containers, Cups, Caps & Closures	66	0.952	2,500	145,000	3.1a

⁽¹⁾ Properties shown represent typical values; not to be construed as specifications. Users should confirm results by their own tests.

⁽²⁾ ASTM D 1238 (190°C/2.16 kg)

⁽³⁾ ASTM D792

⁽⁴⁾ ASTM D638, molded and tested in accordance with ASTM D4976

⁽⁵⁾ ASTM D790B, molded and tested in accordance with ASTM D4976

⁽⁶⁾ Consult the regulations for complete details.

⁽⁷⁾ All medical application uses for DOW HEALTH+™ Polymers must be approved by Dow pursuant to its Medical Policy. Each HEALTH+™ Polymer has been certified in accordance with requirements for some healthcare applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the Dow product is safe, lawful, and technically suitable for the intended use.

Refer to individual technical data sheets (TDSs) for additional property information and handling considerations.

TABLE 2: LINEAR LOW DENSITY POLYETHYLENE (LLDPE) RESINS FOR INJECTION MOLDING APPLICATIONS⁽¹⁾

RESIN NAME	PRODUCT DESCRIPTION; MARKET APPLICATION(S)	MELT INDEX ⁽²⁾ (I ₂ , g/10 min.	DENSITY ⁽³⁾ , g/cc	TENSILE STRENGTH @ YIELD ⁽⁴⁾ , psi	2% SECANT FLEXURAL MODULUS ⁽⁵⁾ , psi	FDA COMPLIANCE – U.S. FDA 21 CFR 177.1520 (c) ⁽⁶⁾
LLDPE RESINS						
DOW™ LLDPE DNDA-7144 NT 7 Resin	Thin-wall Injection Molding (TWIM); Caps & Closures	20	0.924	1,700	56,000	3.1a
DOW™ LLDPE DNDA-8320 NT 7 Resin	General Purpose; Pull Tabs/Living Hinges	20	0.924	1,700	56,000	3.1a
DOWLEX™ 2517 LLDPE Resin	General Purpose; Housewares, Caps & Closures	25	0.917	1,400	34,000	3.1b
DOW™ LLDPE DNDA-8335 NT 7 Resin	General Purpose; Housewares, Caps & Closures	35	0.926	1,600	57,000	3.1a
DOW™ LLDPE DNDB-7147 NT 7 Resin	TWIM; Pull Tabs/Living Hinges; Lids	50	0.926	1,400	61,000	3.1a
DOW™ LLDPE DNDA-1055 NT 7 Resin	TWIM; Caps & Closures; Lids	85	0.928	1,500	70,000	3.1a
DOW™ LLDPE DNDB-1077 NT 7 Resin	TWIM; Caps & Closures; Lids	100	0.929	1,600	76,000	3.1a
DOW™ LLDPE DNDA-1081 NT 7 Resin	TWIM; Lids	128	0.931	1,600	76,000	3.1a
DOW™ LLDPE DNDA-1082 NT 7 Resin	TWIM; Lids	155	0.933	2,400	83,000	3.1a
DOW™ LLDPE DNDA-1088 NT7 Resin	TWIM; Downgauged Lids, High Cavitation Molds Running Short Cycle Times	180	0.932	1,600	76,000	3.1a

TABLE 3: LOW DENSITY POLYETHYLENE (LDPE) RESINS FOR INJECTION MOLDING APPLICATIONS⁽¹⁾

RESIN NAME	PRODUCT DESCRIPTION; MARKET APPLICATION(S)	MELT INDEX ⁽²⁾ (I ₂ , g/10 min.	DENSITY ⁽³⁾ , g/cc	TENSILE STRENGTH @ YIELD ⁽⁴⁾ , psi	2% SECANT FLEXURAL MODULUS ⁽⁵⁾ , psi	FDA COMPLIANCE – U.S. FDA 21 CFR 177.1520 (c) ⁽⁶⁾
LDPE RESINS						
DOW™ LDPE 722 Resin	General Purpose; Caps & Closures	8.0	0.918	1,200	34,000	2.1
DOW™ LDPE 722M Resin	Caps & Closures: Pull Tabs	8.0	0.918	1,200	34,000	2.1
DOW™ LDPE 4012 Resin	Caps & Closures	12.0	0.918	1,450	—	2.2
DOW™ LDPE 993I Resin	General Purpose; Lids; Caps & Closures	25	0.923	1,500	46,000	2.1
DOW™ LDPE 955I Resin	High Clarity; General Purpose; Lids; Caps & Closures	35	0.923	1,400	43,000	2.1
DOW™ LDPE 959S Resin	General Purpose; Lids	55	0.923	1,600	48,000	2.1

⁽¹⁾ Properties shown represent typical values; not to be construed as specifications. Users should confirm results by their own tests.

⁽²⁾ ASTM D1238 (190°C/2.16 kg)

⁽³⁾ ASTM D792

⁽⁴⁾ ASTM D638, molded and tested in accordance with ASTM D4976

⁽⁵⁾ ASTM D790B, molded and tested in accordance with ASTM D4976

⁽⁶⁾ Consult the regulations for complete details.

Refer to individual technical data sheets (TDSs) for additional property information and handling considerations.



INDUSTRY-LEADING DEVELOPMENT AND INNOVATION CAPABILITIES

Dow's wealth of injection molding materials and knowledge are supported by Pack Studios – an exclusive network of technical experts, equipment, and testing capabilities that enables collaborative, accelerated development of innovative technologies and applications.

With seven locations positioned strategically around the world, Pack Studios offers a one-of-a-kind resource to help you bring better injection molded products to market faster.



www.dowpackstudios.com

FAST FACTS

RE: INJECTION MOLDING SOLUTIONS FROM DOW

Dow solutions for injection molding:

- Are used in **primary packaging** for foods, beverages, chemicals, and more.
- Include the industry's broadest range of **HDPE**, **LDPE**, and **LLDPE** options.
- Are well suited for injection and compression molding processes, as well as selected extrusion/thermoforming and foamed applications.
- Offer answers regarding mega trends and other important issues that impact not only the packaging industry, but also the world at large (Table 4).
- Create opportunities to work with our exclusive Pack Studios network (above).

TABLE 4: KEY MEGA TRENDS ADDRESSED BY DOW INJECTION MOLDING SOLUTIONS

INDUSTRY MEGA TRENDS	CAPS & CLOSURES	INDUSTRIAL CONTAINERS	THIN-WALL CONTAINERS	LIDS
Concern for the Environment	●	●	●	●
Health and Wellness	●		●	●
Time Pressure on Consumers/Convenience	●		●	●
Aging Population (e.g., ease of use, portion control)	●		●	●
Safety and Security	●	●	●	●
Enhanced/Maintained Flavor	●	●	●	●

LET'S INNOVATE TOGETHER

DOW'S RICH PORTFOLIO OF INJECTION MOLDING SOLUTIONS CREATES OPPORTUNITIES TO COLLABORATE ON INNOVATIVE NEW DEVELOPMENTS THAT OFFER EXCEPTIONAL PERFORMANCE, IMPROVED SUSTAINABILITY PROFILES, AND PEACE OF MIND. FOR MORE INFORMATION, CONTACT YOUR DOW REPRESENTATIVE, VISIT WWW.DOWRIGIDPACKAGING.COM, OR CALL THE NEAREST LOCATION ON THE FOLLOWING PAGE.



North America		Europe/Middle East	00 800 3694 6367	dow.com
U.S. & Canada	1 800 441 4369		00 31 115 672626	
	1 989 832 1426	Italy	800 783 825	
Mexico	+ 1 800 441 4369	South Africa	00 800 99 5078	
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Brazil	+ 55 11 5188 9000		+ 86 21 3851 4988	
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- use as a critical component in medical devices that support or sustain human life; or
- use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.

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