



**CARBOWAX™ and CARBOWAX SENTRY™
Polyethylene Glycol 400**

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| Product Description | CAS # 25322-68-3 | |
| | CHEMICAL FAMILY—Oxyalkylene Polymer | |
| | CTFA NOMENCLATURE — PEG-8 | |
| Typical Physical Properties | Average Molecular Weight Range | 380 to 420 |
| | Average Hydroxyl Number Range | 295 to 267 |
| | Average Number of Repeating Oxyethylene Units | 8.7 |
| | Density (g/cm ³ @ 20°C) | 1.1254 |
| | Melting or Freezing Range | 4 to 8°C (39 to 46°F) |
| | Solubility in Water (Wt% @ 20°C) | Complete |
| | Viscosity (cSt @ 99°C) | 7.3 |
| | Avg. Liquid Specific Heat (cal/g/°C) | 0.49 |
| | Heat of Fusion (cal/g) | 36 |
| | pH at 25°C (5% Aqueous Solution) | 4.5 to 7.5 |
| Shipping Information | Physical Form | Liquid |
| | Weight per Gallon (lbs @ 20°C) | 9.39 |
| | Flash Point | |
| | Pensky-Martens closed cup (ASTM D93) | >180°C (350°F) |
| | Cleveland open cup (ASTM D92) | >225°C (435°F) |
| Typical Known Applications for Polyethylene Glycol | <ul style="list-style-type: none"> • Adhesives • Agriculture • Ceramics • Chemical Intermediates • Cosmetics • Toiletries • Electroplating / Electropolishing • Food Processing • Household Products | <ul style="list-style-type: none"> • Lubricants • Metal / Metal Fabrication • Paints & Coatings • Paper Industry • Pharmaceuticals • Printing • Rubber & Elastomers • Textiles • Wood Processing |

FDA Status

CARBOWAX SENTRY™ Polyethylene Glycols are produced to meet the requirements of the National Formulary (NF) monograph for drug applications and the Food Chemicals Codex (FCC) monograph for certain food and feed applications.

Handling and Storage

CARBOWAX™ Polyethylene Glycol 400 is sold as a liquid in cans, pails, or drums, and can be stored inside a warm building without provision for heating. If storage time is prolonged, or if tank is heated or in a hot climate, it is preferable to store this product under a nitrogen atmosphere. If heated storage is required, metal temperature should not exceed 50°C (125°F).

Product Stewardship

Dow encourages its customers and potential users to review their applications from the standpoint of human health and environmental aspects. 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 environmental and product safety considerations. Dow literature, including Material Safety Data Sheets, should be consulted prior to use.

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