



**CARBOWAX™ and CARBOWAX SENTRY™**  
**Polyethylene Glycol 1000**  
 Polyethylene Glycols

**Product Description**

CAS # 25322-68-3  
 CHEMICAL FAMILY—Oxyalkylene Polymer  
 CTFANOMENCLATURE — PEG-20

**Typical Physical Properties**

Average Molecular Weight Range	950 to 1050
Average Hydroxyl Number Range	118 to 107
Average Number of Repeating Oxyethylene Units	22.3
Density (g/cm <sup>3</sup> @ 60°C)	1.0926
Melting or Freezing Range	37 to 40°C (99 to 104°F)
Solubility in Water (Wt% @ 20°C)	80
Viscosity (cSt @ 99°C)	17.2
Avg. Liquid Specific Heat (cal/g/°C)	0.54
Heat of Fusion (cal/g)	37
pH at 25°C (5% Aqueous Solution)	4.5 to 7.5

**Shipping Information**

Physical Form	Soft Solid
Weight per Gallon (lbs @ 55°C)	9.16
Flash Point	
Pensky-Martens closed cup (ASTM D93)	>180°C (350°F)
Cleveland open cup (ASTM D92)	>265°C (510°F)

**Typical Known Applications for Polyethylene Glycol**

- Adhesives
- Agriculture
- Ceramics
- Chemical Intermediates
- Cosmetics
- Toiletries
- Electroplating / Electropolishing
- Food Processing
- Household Products
- 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 1000 is sold as a soft solid 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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