CARBOWAX™ and CARBOWAX SENTRY™
Polyethylene Glycol 1000
Polyethylene Glycols

Product Description
CAS # 25322-68-3
CHEMICAL FAMILY—Oxyalkylene Polymer
CTFA NOMENCLATURE—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/cm³ @ 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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