Darwin Chemical Company

600 N Pine Island Road Plantation FL 33324-1311



Propylene Glycol 1,2 Propylene Glycol

Catalog Nr. Q051

Definition Propylene glycol, known also by the systematic name propane-1,2-diol, is an organic

compound (a diol alcohol), usually a faintly sweet, and colorless clear viscous liquid

that is hygroscopic and miscible with water, acetone, and chloroform.

CAS Number 57-55-6

Application As a solvent in many pharmaceuticals, including oral, injectable and topical

formulations. Notably, diazepam, which is insoluble in water, uses propylene glycol

as its solvent in its clinical, injectable form.[5]

As a moisturizer in medicines, cosmetics, food, toothpaste, mouth wash, and tobacco

products

In electronic cigarettes to deliver vaporized nicotine

As an emulsification agent in Angostura and orange bitters

As a solvent for food colors and flavorings

As an ingredient, along with wax and gelatin, in the production of paintballs

As a humectant food additive, labeled as E number E1520

As a cooling agent for beer and wine glycol jacketed fermentation tanks

As a carrier in fragrance oils
As an ingredient in massage oils

As a less-toxic antifreeze

As a solvent used in mixing photographic chemicals, such as film developers

In smoke machines to make artificial smoke for use in firefighters' training and

theatrical productions

In hand sanitizers, antibacterial lotions, and saline solutions

In cryonics

As a working fluid in hydraulic presses As a coolant in liquid cooling systems

Technical Data

PROPERTIES

Flash point: 99C (210F) CC
Appearance: Clear oily liquid.
Odor: Odorless.

Solubility: Miscible in water.
Specific Gravity: 1.0361 @ 20C/4C
Boiling Point: 188.2C (370F)
Melting Point: -59C (-74F)

Vapor Density (Air=1): 2.6

Vapor Pressure (mm Hg): 0.129 @ 25C (77F)

Evaporation Rate (BuAc=1): 0.01

Packaging & Handling

UN Number Class Packaging Group

We cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used. We accept no responsibility for test results obtained by the application of this information or the safety and suitability of our products, either alone or in combination with other products. Users are advised to make their own test to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products.