Monopropylene Glycol

Pharmaceutical Grade



Chemical Industries.

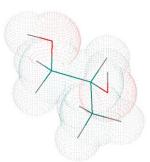
Technical Data Sheet

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Propylene Glycol (MPG)

Chemical Name: Propylene Glycol

Trade Names: MPG/Pharmaceutical grade



Introduction:

Propylene Glycol (MPG), known also by the systematic name propane-1,2-diol, is an organic compound (a diol alcohol) that is usually a tasteless, odorless and colorless clear oily liquid. It is hygroscopic and miscible with water, acetone and chloroform.

General Applications:

MPG is widely used as ingredient in a diverse range of cosmetics and personal care products. It provides outstanding functionality as a solvent, coupling agent, carrier, emulsion stabilizer, dispersant. softening viscosity modifier and humectants. agent, It is also used in oral care (mouth washers, toothpastes), skin care (creams, lotions and oils), deodorants and anti-perspirants (roll & stick), hair care (shampoo, conditioner and styler, coloring items), shaving (creams, foams, gels, after shaves), bath and shower soaps, gels and moisturizers, body care (wipers, antiseptics), cleaners and disinfectants.

MPG is an effective humectant, preservative and stabilizer, and may be used in such diverse applications as bakery goods, food flavorings, salad dressings and semi-moist pet food.

Cosmetic & Personal Care

A main ingredient in many cosmetic products, MPG serves as a moisturizer, emulsifier, fragrance carrier and humectant, due to its ability to attract and hold water. Some of the daily-use products include:

- Baby wipes
- Bubble baths and shower products
- Deodorants and antiperspirants
- Shampoos, styling gels and hair dyes
- · Shaving products

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- Face creams
- Hand sanitizers, antibacterial lotions, and saline solutions
- Dental care (mouth washes and toothpastes)
- Perfumes and colognes
- Color cosmetics (blushes, eyeliner, lipsticks, eye shadow)

MPG is also used as an enzyme stabilizer, diluent and solvent in leading liquid detergent formulations.

Food Ingredients

MPG has a variety of uses as it relates to food ingredients and food manufacturing including:

- Solvent for food additives (i.e., colors, antioxidants, enzymes and emulsifiers)
- Flavor agent
- Humectant and stabilizer in items such as fruits, vegetables and bakery goods
- Low-temperature heat-transfer fluids involving indirect food contact, such as brewing and dairy uses, as well as refrigerated grocery display cases
- · Plasticizer and softening agent for items such as cork seals
- Solvent for printing inks used in food packaging
- Equipment cleaner, to remove contamination from food processing equipment

Pharmaceutical

Typically in pharmaceutical applications, MPG is used as a non-active ingredient or carrier. MPG is used most frequently in oral, topical and injectable drug products.



Packaging:

Packaging Type	Net weight	Gross weight	No. of drums per pallet	No. of pallets in a 20 FLC	Shelf life	IMCO Class
New PE	220 Kgs	238 Kgs	4	20	2 yrs	Non-
Drums						Imco

Notice:

Customized packaging will be available according to customer's request.

Safety, Handling & Storage:

Full information on the safety, handling and storage of MPG/Pharmaceutical grade is available in the corresponding Material Safety Data Sheet (<u>MSDS</u>).



Specification

No.	Test	Standard	Reference
1	Appearance	Clear, Colorless liquid	
2	Specific Gravity @ 25°C	1.035-1.037	
3	Acidity	NMT 0.2 ^{cc} of NaOH 0.1N for 10 ^{cc} sample	
4	Chloride	NMT 70 ppm	
5	Sulfate	NMT 60 ppm	USP33-NF26
6	Heavy Metals	NMT 5ppm	05F55-MF20
7	Residue on Ignition	NMT 3.5mg in 50g sample	
8	Water	NMT 0.2%	
9	Assay	NLT 99.5%	
10	MEG & DEG	NMT 0.1% for each of them	

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