

Dipropylene Glycol (KEDPG)



KIMYAGARAN
Emrooz
Chemical Industries Co.

Technical Data Sheet



Dipropylene Glycol (KEDPG)

Chemical Name:

Dipropylene Glycol

Trade Name:

KEDPG

Introduction:

Dipropylene glycol (DPG) is a derivative of propylene oxide (PO) and is produced in a two-step process. The first step is the reaction of PO with water results in a mixture of MPG and DPG and the second step is the distillation and purification of the mixture into its two separate components.

General Applications:

Dipropylene Glycol (DPG) is used as a reactive intermediate in the manufacture of high-performance unsaturated polyester resins, polyurethanes and plasticizers. DPG has great solvency, a low evaporation rate, low toxicity and high viscosity.

DPG is most often used as a chemical intermediate in several diverse application areas. DPG dibenzoate is a high volume plasticizer made by the esterification of dipropylene glycol with benzoic acid. As a reactant in unsaturated polyester resins, dipropylene glycol adds flexibility and hydrolytic stability to the finished resin and reduces the viscosity of the uncured resin. In dicyclopentadiene (DCPD)-modified unsaturated polyester resins (UPRs), DPG helps to add flexibility to the cured resin making it less brittle. In urethane production, DPG acts as an initiator for urethane polyol synthesis using epoxides, and as the polyol itself in rigid polyurethane foam systems.

DPG is similar to other glycols in general properties. However, its greater solvency for certain materials, low evaporation rate, low toxicity and higher viscosity makes it better-suited for applications where other glycols are less effective. Some applications that take advantage of DPG's unique properties are brake fluid formulations, cutting-oils, textile lubricants, printing inks, coatings, industrial soaps, as well as solvents for agricultural and insecticidal formulations. DPG's



excellent solvency for castor oil makes it extremely useful as a component of hydraulic brake-fluid formulations, while its affinity for other oils has led to its use in cutting oils, textile lubricants and industrial soaps.

DPG is the solvent of choice for many fragrance and cosmetic applications. Excellent co-solvency for water, oils, and hydrocarbons, combined with low odor, low skin irritation potential, low toxicity, consistent isomer distribution and excellent quality, make it an important raw material in this industry.

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 Drums	220 Kgs	238 Kgs	4	20	2 yrs	Non-Imco

Notice:

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

Safety, Handling & Storage:

Full information on the safety, handling and storage of KEDPG is available in the corresponding Material Safety Data Sheet ([MSDS](#)).



Dipropylene Glycol

Trade Name: **KEDPG**

Specification

No.	Test	Standard	Reference
1	Appearance	Clear Liquid	---
2	Refractive index @ 25°C	1.4387-1.4397	ASTM D1218
3	Color, Pt-Co	Max. 10	ASTM D1209
4	Acidity(as acetic acid),%	Max. 0.01	ASTM D1613
5	Chloride, ppm	Max. 15	USP33-NF28
6	Distillation range, °C	222-236	ASTM E202
7	Propylene glycol, %	Max. 1	ASTM E202
8	Assay by GC	Min.99%	ASTM E202
9	Water, %	Max. 0.2	ASTM E203

Website: www.kimyagaran.com

Tel: +98-21-88746565

Fax: +98-21-88746564

E-Mail: info@kimyagaran.com

Address: No.133, West Hoveizeh Street, North Sohrevardi Ave., Tehran, Iran