# Dipropylene Glycol (DPG) Fragrance Grade

**Batch:** 4558215

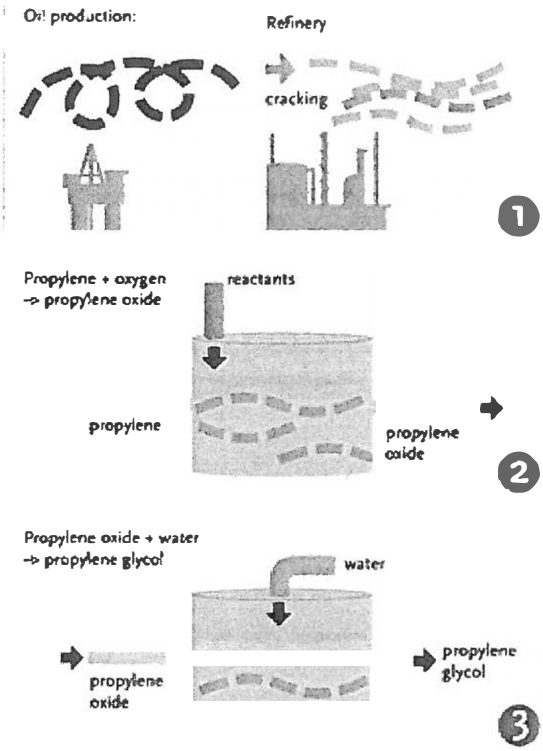
**Best Before date:** May 2028

| **Parameter** | **Specification** | **Result** | **Unit** |
|---|---|---|---|
| Appearance | Colourless, transparent, slightly viscous liquid | | |
| Odour | Pass | Pass | |
| Colour (Pt-Co) | ≤10 | <5 | Hazen |
| Moisture | ≤0.2 | 0.042 | % weight |
| PG | ≤0.20 | 0.011 | % weight |
| TPG | ≤0.10 | 0.041 | % weight |
| Specific gravity ($d_{20}^{20}$) | 1.020 – 1.025 | 1.0246 | |
| Acidity | ≤75 | 6 | ppm |
| Assay | ≥99.5 | 99.893 | % weight |
| Fe | ≤1 | Nd | mg/kg |
| Chloride | ≤1 | <1 | mg/kg |
| Residue on ignition | ≤0.003 | 0.0011 | % weight |
| Heavy metals | ≤20 | <20 | ppm |
| As | ≤2 | <2 | ppm |

# Productio

## Simple process

In the traditional **production process propylene glycol** is made from propylene oxide reacted with water.




The resulting material is a mixture of mono-, di- and tri-propylene glycols that are then distilled to purify to the different grades of propylene glycol.

Propylene glycol is typically produced in two grades: **technical or industrial grade**, and **USP/EP grade**. The latter designates the requirements for the US Pharmacopiea and the European Pharmacopoiea, but this grade is also the grade foruse in food, feed and personal care applications.

# BSE/TSE/GMO Declaration

## Product Name: Dipropylene Glycol (DPG) Fragrance Grade

We hereby confirm that, for the following products, no measure relating to Bovine Spongiform Encephalopathy (BSE), Transmittable Spongiform Encephalopathy (TSE) and Genetically Modified Organism (GMO) is applicable.

**Product name and description**

Dipropylene Glycol (DPG) Fragrance Grade

This product is a petrochemical product, and its manufacturing process does not include any raw material nor additive with animal of vegetal origin. As a result, no measure related with the Bovine Spongiform Encephalopathy (BSE), Transmittable Spongiform Encephalopathy (TSE) and Genetically Modified Organism (GMO) is applicable. In addition to this, the equipment used for their manufacture is exclusive and there is no possibility of contamination with animal or vegetal derived products.

We are distributor of this/these product(s), and we hold the primary information provided by the raw material manufacturer to substantiate the information provided.

# Safety Data Sheet

according to 1907/2006/EC, Article 31 **Product**
**Name: Di Propyleen Glycol**

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

### 1.1. Product identifier

**Product name:** Dipropyleenglycol

Dipropylene glycol (isomer unspecified)
**CAS Number:** 25265-71-8
**EC number:** 246-770-3
**Registration number:** 01-2119456811-38

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

**Application of the substance / the mixture**
Distribution
Formulation
Laboratory chemicals
Cleaning material/ Detergent
Lubricant
Metal-working product
Coatings
Additive for polymers
Fuel additive
Agricultural chemicals
Chemical intermediate
Binder
Water treatment

### 1.3. Details of the supplier of the safety data sheet

**Company:**
YouWish

Address: Transistorstraat 91-02, 1322 CL Almere, The Netherlands

**Emergency telephone number:**
+31 36 2036384 (Mon-Fri 9am – 4pm)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**
The substance is not classified, according to the CLP regulation.

### 2.2. Label elements

**Labelling according to Regulation (EC) No 1272/2008** Void
**Trade name**: Dipropyleenglycol
**Hazard pictograms** Void

**Signal word** Void
**Hazard statements** Void

**2.3. Other hazards**
**Results of PBT and vPvB assessment**
**PBT:** Not applicable.
**vPvB:** Not applicable.

## SECTION 3: COMPOSTION/INFORMATION ON INGREDIENTS

3.1. Substances
CAS No. Description
25265-71-8 oxydipropanol
Identification number(s) Not applicable.
EC number: 246-770-3
SECTION 4: FIRST AID MEASURES
4.1 Description of first aid measures:
General information: Immediately remove any clothing soiled by the product.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately rinse with water. If skin irritation continues, consult a doctor.
After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing: Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor.
4.2 Most important symptoms and effects, both acute and delayed:
Coughing
Dizziness
Headache
4.3. Indication of any immediate medical attention and special treatment needed:
No further relevant information available.
SECTION 5: FIREFIGHTING MEASURES
5.1. Extinguishing media:
Suitable extinguishing agents:
Water haze
Water spray
Fire-extinguishing powder
Alcohol resistant foam
Carbon dioxide
For safety reasons unsuitable extinguishing agents: Water with full jet
5.2. Special hazards arising from the substances or mixture:
Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Carbon monoxide (CO)
CO2
5.3. Advice for firefighters:
Protective equipment:
Wear self-contained respiratory protective device.
Wear fully protective suit.

**Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures:
Wear protective clothing.
Keep people at a distance and stay on the windward side.
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.

### 6.2. Environmental precautions:
Do not allow to penetrate the ground/soil.
Do not allow to enter sewers/ surface or ground water.

### 6.3. Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable receptacles.
Dispose contaminated material as waste according to item 13.

### 6.4. Reference to other sections:
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling:
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

### 7.2. Conditions for safe storage, including any incompatibilities:
**Storage:**
**Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Suitable material for receptacles and pipes: glass.
**Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from flammable substances.
Store away from oxidising agents.
**Further information about storage conditions:**
Keep container tightly sealed.
Protect from heat and direct sunlight.
Store in cool, dry conditions in well sealed receptacles.
Store receptacle in a well ventilated area.
Protect from humidity and water.
This product is hygroscopic.
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

**7.3. Specific end use(s)**
See §1.2
No further relevant information available.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION ·**

**Additional information about design of technical facilities: No further data; see item 7.**

**8.1. Control parameters:**
**Ingredients with limit values that require monitoring at the workplace:** Not required.

| · **DNELs** | | |
|---|---|---|
| Oral | DNEL Long-term - Systemic (consumer) | 24 mg/kg bw/day (/) |
| Dermal | DNEL Long-term - Systemic (worker) | 84 mg/kg bw/day (/) |
| | DNEL Long-term - Systemic (consumer) | 51 mg/kg bw/day (/) |
| Inhalative | DNEL Long-term - Systemic (worker) | 238 mg/m³ (/) |
| | DNEL Long-term - Systemic (consumer) | 70 mg/m³ (/) |

| · **PNECs** | |
|---|---|
| PNEC Fresh water | 0.1 mg/l (/) |
| PNEC Marine water | 0.01 mg/l (/) |
| PNEC Intermittent releases | 1 mg/l (/) |
| PNEC Fresh water sediment | 0.238 mg/kg (/) |
| PNEC Marine sediment | 0.0238 mg/kg (/) |
| PNEC Soil | 0.0253 mg/kg (/) |
| PNEC STP | 1,000 mg/l (/) |

· **Additional information:** The lists valid during the making were used as basis.

**8.2. Exposure controls:**

**Personal protective equipment:**
**General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Wash hands before breaks and at the end of work.
Do not eat, drink, smoke or sniff while working.
Immediately remove all soiled and contaminated clothing
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

**Respiratory protection:**
Use suitable respiratory protective device in case of insufficient ventilation.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Filter A/P2

**Protection of hands:**

Protective gloves

Check protective gloves prior to each use for their proper condition.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**
EN374
Butyl rubber, BR
Nitrile rubber, NBR
Recommended thickness of the material: ³ 0.3 mm
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material**
For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 16523-1:2015: Level 6).
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**
EN 166

Tightly sealed goggles

**Body protection:** Protective work clothing

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties:

| | |
|---|---|
| **General Information** | |
| **Appearance:** | |
| **Form:** | Fluid |
| **Colour:** | Colourless |
| **Odour:** | Odourless |
| **Odour threshold:** | Not determined. |
| **pH-value:** | 7-8.5 |
| **Change in condition** | |
| **Melting point/freezing point:** | <-20 °C |
| **Initial boiling point and boiling range:** | 227 °C |
| **Flash point:** | 128-130 °C |
| **Flammability (solid, gas):** | Not applicable. |
| **Auto-ignition temperature:** | 332 °C |
| **Decomposition temperature:** | Not determined. |
| **Auto-ignition temperature:** | Product is not selfigniting. |
| **Explosive properties:** | Product does not present an explosion hazard. |
| **Explosion limits:** | |
| **Lower:** | Not determined. |
| **Upper:** | Not determined. |
| **Vapour pressure at 25 °C:** | 0.013 hPa |
| **Density at 20 °C:** | 1.02 g/cm³ |
| **Vapour density** | 4.63 |
| **Evaporation rate** | <0.05 |
| **Solubility in / Miscibility with water:** | Fully miscible. |
| **oxidizing properties** | Not oxidizing |
| **Partition coefficient: n-octanol/water:** | -0.46 log POW |

**Viscosity:**
**Dynamic at 25 °C:** 75 mPas
**Kinematic at 20 °C:** 118 $mm^2/s$

**9.2. Other information**
No further relevant information available.

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity:**
Not determined.

**10.2. Chemical stability:** Stable

**Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.

**10.3. Possibility of hazardous reactions:**
Danger of bursting.
Reacts with oxidising agents.
Reacts with flammable substances.
Reacts with strong acids.
Reacts with strong alkali.

**10.4. Conditions to avoid:**
Moisture
Extremely high temperatures

**10.5. Incompatible materials:**
Strong Acids
Strong alkalis
Strong oxidizing agents
Zn

**10.6. Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Aldehyde

## SECTION 11: TOXOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

| · *LD/LC50 values relevant for classification:* | | | |
|---|---|---|---|
| *Oral* | *LD50* | | *>5,000 mg/kg (rat) (OECD 401)* |
| *Dermal* | *LD50* | | *>5,010 mg/kg (rabbit) (OECD 402)* |
| *Inhalative* | *LC50/4 h* | *(Aerosol/Mist)* | *>2.34 mg/l (rat)* |

**Primary irritant effect:**
**Skin corrosion/irritation** Based on available data, the classification criteria are not met.
**Serious eye damage/irritation** Based on available data, the classification criteria are not met.
**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
**CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
**Germ cell mutagenicity** Based on available data, the classification criteria are not met.
**Carcinogenicity** Based on available data, the classification criteria are not met.

**Reproductive toxicity** Based on available data, the classification criteria are not met.
**STOT-single exposure** Based on available data, the classification criteria are not met.
**STOT-repeated exposure** Based on available data, the classification criteria are not met.
**Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1 Toxicity:**

| · *Aquatic toxicity:* | |
|---|---|
| *EC 50 (72 h)* | *>100 mg/l (Desmodesmus subspicatus) (OECD 201)* |
| *LC 50 (96 h) (static)* | *46,500 mg/l (Pimephales promelas)* |
| | *>1,000 mg/l (Oryzias latipes) (OECD 203)* |
| *EC 50 (48 h)* | *>100 mg/l (daphnia magna) (OECD 202)* |
| *LC 50 (48 h)* | *3,181 mg/l (/) (Xenopus laevis)* |

**12.2. Persistence and degradability** No further relevant information available.

| · *Degree of elimination:* | |
|---|---|
| *OESO 301 F* | *84.4 % (/)* |

**12.3. Bio accumulative potential:**

| | |
|---|---|
| *BCF* | *0.3-4.6 (Cyprinus caprio) (42d)* |

**Other information:** The product is easily biodegradable.

**12.4. Mobility in soil:** Koc : 0.76
**Additional ecological information:**
**General notes:** Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

**12.5. Results of PBT and vPvB assessment:**
**PBT:** Not applicable.
**vPvB:** Not applicable.

**12.6 Other adverse effects:** No further relevant information available.

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods:**
**Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
**Uncleaned packaging:**
Recommendation: Disposal must be made according to official regulations.

## SECTION 14: TRANSPORT INFORMATION

**14.1 UN-Number**
**ADR, ADN, IMDG, IATA** Void

**14.2 UN proper shipping name**
**ADR, ADN, IMDG, IATA** Void

**14.3 Transport hazard class(es)**
**ADR, ADN, IMDG, IATA**
**Class** Void

14.4 Packing group
**ADR, IMDG, IATA** Void

**14.5 Environmental hazards**: Not applicable.

**14.6 Special precautions for user** Not applicable.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

**UN "Model Regulation":** Void

## SECTION 15: REGULATORY INFORMATION

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
**Labelling according to Regulation (EC) No 1272/2008** GHS label elements

**National regulations:**
**Water hazard class:** Water hazard class 1 (Assessment by list): slightly hazardous for water.

**· 15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: OTHER INFORMATION

The information provided in these documents is based on our present state of knowledge of the product and is given in good faith and to the best of our experience. However, it should not be construed as a technical specification or as guaranteering specific properties. In no event we will be responsible for damages or effects of any nature whatsoever, either express or implied, resulting from the use of this information. It is the own responsibility of the consignee and the user of the product to comply with all prevailing and applicable laws, regulations and directives. They should also make their own determination as to the suitability of the product for a particular use or application."

**Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

# SALES SPECIFICATION

# DIPROPYLENE GLYCOL

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Product Name: **DIPROPYLENE GLYCOL**

Chemical Name: Dipropylene Glycol

CAS No: 25265-71-8

EC Number: 246-770-3

| PROPERTY | UNIT | VALUE |
|---|---|---|
| Purity | % wt | >99.5 |
| MPG content | % wt | <0.1 |
| TPG content | % wt | <0.1 |
| Water Content | % wt | <0.1 |
| Colour | Hazen | <10 |
| Acidity (as acetic acid) | % wt | <0.01 |
| Ash | % wt | <0.01 |

**May 2023**

**Vegan Declaration**

Product Name: Dipropylene Glycol (DPG) Fragrance Grade

We hereby confirm that the manufacture and development of the following products and their ingredients do not and have not involved the use of any animal product, by product or derivative. *
*The Vegan Society understands the word “animal” to refer to the entire Animal Kingdom, that is all vertebrates and all multi-cellular invertebrates.
Product name and description
Dipropylene Glycol (DPG) Fragrance Grade

This product is a petrochemical product, and its manufacturing process does not include any raw material nor additive with animal or vegetal origin. It contains no animal ingredients or animal by-products, uses no animal ingredients or by-products in the manufacturing process, and is not tested on animals. The equipment used for its manufacture is exclusive and there is no possibility of contamination with animal or vegetal derived products.

We are distributor of this/these product(s) and we hold the primary information provided by the raw material manufacturer to substantiate the information provided.

28/09/2021