

Date revised: 16.01.2023

30004001052 Version: 16 / BE Master No. M-051 Print date: 2-4-2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Monopropylene glycol 1.2- feeding material (feed)

Registration no.

EC No.: 200-338-0

REACH-Registration no. 01-2119456809-23-XXXX

CAS No. 57-55-6

Use of the substance/mixture

Animal feed

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

Identified Uses

At the moment we have no information available for the identified uses. In the presence of these data will be included in the safety data sheet.

Uses advised against

Electronic cigarettes (e-cigarettes). Generation of artificial smoke.

1.3. Details of the supplier of the safety data sheet

Address

Vivochem B.V.

Darwin 5

NL 7609 RL Almelo

Telephone no. +31 546 577774 Fax no. +31 546 577701 E-mail address kwaliteit@vivochem.nl

1.4. Emergency telephone number

National poisoning information center (NVIC) +31 (0) 88 755 8000 Only for the purpose of informing medical personnel in case of acute intoxications.

Only for the purpose of informing medical personnel in case of acute intoxications.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This product is not classified hazardous in accordance with EC directives.

2.2. Label elements

Further supplemental information

Restricted to professional users

2.3. Other hazards

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients

3.1. Substances

Further ingredients

Propane-1,2-diol

CAS No. 57-55-6



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SECTION 4: First aid measures

4.1. Description of first aid measures

General information

If the patient is likely to become unconscious, place and transport in stable sideways position.

After inhalation

Ensure supply of fresh air. Irregular breathing/no breathing: artificial respiration. In the event of symptoms take medical treatment.

After skin contact

Wash immediately with plenty of water for several minutes. Take off contaminated clothing and wash before reuse. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). In case of irritation consult an oculist.

After ingestion

Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Hints for the physician / treatment

Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, Dry chemical extinguisher, Water spray jet, Alcohol-resistant foam

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible. Carbon monoxide (CO); Carbon dioxide (CO2); If a fire breaks out nearby, pressure build-up and danger of bursting are possible.

5.3. Advice for firefighters

Use self-contained breathing apparatus. Wear full protective suit.

Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Do not inhale vapours. Do not inhale mist. Ensure adequate ventilation. High risk of slipping due to leakage/spillage of product.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Rinse away rest with plenty of water. When picked up, treat material as prescribed under Section 13 "Disposal".



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6.4. Reference to other sections

Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate ventilation.

Advice on protection against fire and explosion

Keep away from sources of ignition. Take action to prevent static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Recommended storage < 40 °C

temperature

Opaque HDPE-plastic container

Storage class according to TRGS 510 10 Flammable liquids

Protect from heat and direct sunlight. Keep container tightly closed and dry in a cool, well-ventilated place. Protect from atmospheric moisture and water. Product is hygroscopic.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Derived No/Minimal Effect Levels (DNEL/DMEL)

Propane-1,2-diol

Reference substance Propane-1,2-diol

Derived No Effect

Level (DNEL)

Conditions Worker Long term inhalative Systemic effects

Concentration 168 mg/m³

Propane-1,2-diol

Derived No Effect

Level (DNEL)

Conditions Worker Long term inhalative Local effects

Concentration 10 mg/m³

Propane-1,2-diol

Derived No Effect

Level (DNEL)

Conditions Consumer Long term inhalative Systemic effects

Concentration 50 mg/m³

Propane-1,2-diol

Derived No Effect

Level (DNEL)

Conditions Consumer Long term inhalative Local effects

Concentration 10 mg/m³

Predicted No Effect Concentration (PNEC)

Propane-1,2-diol

Reference substance Propane-1,2-diol

Type of value PNEC Type Water

Concentration 260 mg/l



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Propane-1,2-diol

Type of value PNEC
Type Saltwater

Concentration 26 mg/l

Propane-1,2-diol

Type of value PNEC

Type Sewage treatment plant (STP)

20000 mg/l

Propane-1,2-diol

Type of value PNEC

Type Freshwater sediment

Concentration 572 mg/kg TG

Propane-1,2-diol

Type of value PNEC

Type Marine sediment

Concentration 57,2 mg/kg TG

Propane-1,2-diol

Type of value PNEC

Type Soil

Concentration 50 mg/kg TG

Type of value PNEC

Type Marine sediment

Concentration 26 mg/l

Type of value PNEC

Type sporadic release

Concentration 183 mg/l

8.2. Exposure controls

Concentration

General protective and hygiene measures

Take off immediately all contaminated clothing. Avoid contact with skin and eyes. Keep seperated from food-stuffs and feed-stocks. At work do not eat, drink, smoke or take drugs. Wash hands before breaks and after work. Provide good ventilation of working area (local exhaust ventilation if necessary). Personal protective equipment must comply with the Regulation (EC) No 2016/425 and the resulting CEN standards. The following information on personal protective equipment (PPE) is to be understood as a suggestion. The selection of the necessary PPE must be considered by the employer depending on the activities to be carried out and the local conditions. If it is determined during the on-site risk assessment that there is no danger to the employee, there is no need to wear PPE or the scope of the PPE to be used can be adjusted accordingly.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Short term: filter apparatus, combination filter A-P2

Hand protection

Appropriate Material Chloroprene

Material thickness >= 0,6 mm Breakthrough time >= 480 min

Eye protection

Tightly fitting safety glasses

Body protection

Clothing as usual in the chemical industry.



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state liquid Colour colourless Odour odourless

Melting point/freezing point

-20 °C Value

Initial boiling point and boiling range

Value 186 to 190 °C

Flammability (solid, gas)

No data available

Upper/lower flammability or explosive limits

Lower explosion limit 2.6 %(V) Upper explosion limit 12,5 %(V)

Flash point

Value °C 104 appr.

Ignition temperature

400 °C Value

Decomposition temperature

Remarks No decomposition if used as prescribed.

pH value

Value 6,5 7,5 to

Concentration/H2O 50 %

Remarks Not applicable

Viscosity

dynamic

Value 43,4 mPa.s 25 °C

Temperature

Solubility(ies) Medium Water

°C Temperature 20 Remarks Completely miscible

Partition coefficient: n-octanol/water

Reference substance Propane-1,2-diol

log Pow -1.07

Remarks Bioaccumulation is not expected

Vapour pressure

Value 0,2 hPa Temperature 25 °C

Density

Value 1.037 g/cm³ appr.

°C Temperature 20

Vapour density

No data available Remarks

9.2. Other information

Odour threshold

Remarks No data available



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Evaporation rate

Remarks No data available

Explosive properties

Remarks No data available

Oxidising properties

Remarks No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Under normal conditions of storage and use, hazardous reactions will not occur.

10.2. Chemical stability

The product is stable. Protect from atmospheric moisture and water.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Protect from atmospheric moisture and water. Protect from direct sunlight.

10.5. Incompatible materials

Reactions with strong acids. Reactions with strong alkalies. Reactions with strong oxidising agents.

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide, Aldehydes

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity (Components)

Propane-1,2-diol

Species rat

LD50 > 2000 mg/kg

Acute dermal toxicity (Components)

Propane-1,2-diol

Species rabbit

LD50 > 2000 mg/kg

Acute inhalative toxicity (Components)

Propane-1,2-diol

Species rat

LC50 44,9 mg/l

Duration of exposure 4 h

Source ECHA

Skin corrosion/irritation

Propane-1,2-diol

evaluation non-irritant

Serious eye damage/irritation

Propane-1,2-diol

evaluation slight irritant effect - does not require labelling

Sensitization (Components)

Propane-1,2-diol

evaluation non-sensitizing

Mutagenicity (Components)



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Propane-1,2-diol

No indications of genotoxicity are available.

Reproduction toxicity (Components)

Propane-1,2-diol

No indications of toxic effects were observed in reproduction studies in animals.

Carcinogenicity (Components)

Propane-1.2-diol

Indications of possible carcinogenic effects are not available.

Specific Target Organ Toxicity (STOT)

Single exposure

Propane-1.2-diol

No data available

Repeated exposure

Propane-1,2-diol

Organs: Nervous system

Aspiration hazard

No information available.

11.2 Information on other hazards

Endocrine disrupting properties with respect to humans

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information

12.1. Toxicity

Fish toxicity (Components)

Propane-1,2-diol

Species rainbow trout (Oncorhynchus mykiss)
LC50 40613 mg/l
Duration of exposure 96 h

Daphnia toxicity (Components)

Propane-1,2-diol

Species Ceriodaphnia Dubia

LC50 18340 mg/l

Duration of exposure 48 h Species Ceriodaphnia Dubia

NOEC 13020 mg/l

Duration of exposure 7 d

Algae toxicity (Components)

Propane-1,2-diol

Species Pseudokirchneriella subcapitata

ErC50 19000 mg/l

Duration of exposure 96 h

Bacteria toxicity (Components)

Propane-1,2-diol

Species Pseudomonas putida

NOEC > 20000 mg/l

Duration of exposure 18 h

12.2. Persistence and degradability

Biodegradability (Components)



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Propane-1,2-diol

Value 81 %

Duration of test 28 d

evaluation Readily biodegradable (according to OECD criteria)

Value 96 %

Duration of test 64 d

evaluation Readily biodegradable (according to OECD criteria)

12.3. Bioaccumulative potential

Partition coefficient: n-octanol/water

Reference substance Propane-1,2-diol

log Pow -1,07

Remarks Bioaccumulation is not expected

Bioconcentration factor (BCF)

Propane-1,2-diol

BCF 0.09

Remarks Bioaccumulation is not expected

Source Estimated value

12.4. Mobility in soil

Highly mobile in soils

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria.

12.6 Endocrine disrupting properties

Endocrine disrupting properties with respect to the envrionment

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

Behaviour in environment compartments

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Do not allow to enter drains or water courses.

Disposal recommendations for packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

SECTION 14: Transport information



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	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport	The product does not constitute a hazardous substance in sea transport	The product does not constitute a hazardous substance in air transport
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
14.4. Packing group	-	-	-
Label			
14.5. Environmental hazards			

Information for all modes of transport

14.6. Special precautions for user

No information available.

Other information

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC-Content according to directive 2010/75/EU

VOC (EU) 100 %

TA-Luft

Section 5.2.5: Organic Substances (to be indicated as total carbon; exept for substances according 5.2.1.)

Other information

The product does not contain substances according to: Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

Registration status

Propane-1,2-diol

AICS (Australian Inventory	listed
of Chemical Substances)	
DSL (Canada)	listed
ENCS (Japan)	listed
IECSC (China)	listed
NZIOC(New Zealand)	listed
PICCS (Philippines)	listed
TSCA (USA)	listed

General non-supported applications

Generation of artificial smoke/theatrical fogs/artificial snow. Production of tobacco. Manufacture of tobacco products, electronic cigarettes, or marijuanna products. Use as an active in pesticides. Use as heat transfer fluids without inhibitors, including as an ingredient in fluids for warming or cooling foods or



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beverages or for heating an enclosed space where personnel exposure is possible. Manufacture of munitions or chemical weapons. Ingredient in cat food

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations

AC: Article Category

ACGIH: American Conference of Governmental Industrial Hygienists

ADN: Accord européen relatif au transport international des marchandises dangereuses par voie de

navigation intérieure

ADNR: Accord européen relatif au transport international des marchandises dangereuses par navigation sur le Rhin

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route

AGW: Arbeitsplatzgrenzwert

AICS: Australian Inventory of Chemical Substances

AOX: adsorbable organically bound halogens

ARW: Arbeitsplatzrichtwert (Germany)

ASTM: American Society for Testing And Materials

ATE: acute toxicity estimates

ATP: Adaptation to technical and scientific progress

AWsV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Germany)

BAR: Biologischer Arbeitsstoff-Referenzwert

BCF: bioconcentration factor

BetrSichV: Betriebssicherheitsverordnung (Germany)

BG: Berufsgenossenschaft (Germany)

BGW: Biologischer Grenzwert **BLW**: Biologischer Leitwert

BOD: biochemical oxygen demand

CAS: Chemical Abstracts Service

cATpE: converted acute toxicity point estimate

CEA: Comité Européen des Assurances

CEFIC: European Chemical Industry Council

CESIO: Comité Européen des Agents de Surface et leurs Intermédiaires Organiques

ChemG: Chemikaliengesetz (Germany) CMR: Cancerogen Mutagen Reprotoxic

COD: chemical oxygen demand

DFG: Deutsche Forschungsgemeinschaft

DIN: german industry standard

DMEL: Derived minimal effect level

DNEL: Derived no effect level

DOC: dissolved organic carbon

DSL: Canada Domestic Substances List

EAK: Europäischer Abfallkatalog

EbC: inhibitory concentration of growth

EC: effective concentration EC: European Community

ECETOC: European Centre For Ecotoxicology and toxicology of Chemicals

ECHA: European Chemicals Agency **EEC:** European Economic Community

EG: Europäische Gemeinschaft

EH40: List of approved workplace exposure limits

EINECS: European Inventory of Existing Commercial Chemical Substances

EKA: Expositionsäquivalente für krebserzeugende Arbeitsstoffe

EL: effect level

ELINCS: European List of Notified Chemical Substances

EmS: Emergency Schedules



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EN: european standards

ENCS: Japanese Existing and New Chemical Substances Inventory

ERC: Environmental Release Category
ErC: inhibitory concentration of the growth rate

EU: European Union

EWG: Europäische Wirtschaftsgemeinschaft

FDA: Food and Drug Administration

FMVSS: National Highway Traffic Safety Administration

GefStoffV: Gefahrstoffverordnung GGVSee: Gefahrgutverordnung See

GHS: Globally Harmonized System of classification and Labelling of Chemicals

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IBC: Intermediate Bulk Container IC: inhibitory concentration

ICAO: International Civil Aviation Organization

IECSC: Chinese Chemical Inventory of Existing Chemical Substances

IMDG: International Maritime Code for Dangerous Goods

IMO: International Maritime Organization

INCI: International Nomenclature of Cosmetic Ingredients IRPTC: International Register of Potentially Toxic Chemicals

ISO: International Organization for Standardization

IUCLID: International Uniform Chemical Information Database

Cat: category

KBwS: Kommission zur Bewertung wassergefährdender Stoffe (Germany)

KECI: Korea Existing Chemicals Inventory

LC: Lethal concentration

LD: Lethal dose

LDLo: lethal dose low

LGK: storage category

LL: Lethal level

LLC: Lowest lethal concentration

LOAEL: Lowest observed adverse effect level LOEC: Lowest observed effect concentration

LOEL: Lowest observed effect level

Log pow: logarithm of the distribution coefficient n-octanol / water

LQ: limited quantity

MAC: Maximale aanvaarde concentratie (Netherlands)

MAK: Maximale Arbeitsplatz-Konzentration

MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified

by the Protocol of 1978 (MARPOL: Marine Pollution)

MEL: Maximum exposure limits

MITI: Ministry of International Trade and Industry (Japan)

n.a.g.: nicht anders genannt

NATEC: Naval Air Technical Data and Engineering Service Command

NLP: No-longer Polymer

NOAEC: No observed adverse effect concentration

NOAEL: no observable adverse effect level NOEC: No observable effect concentration

NOEL: No observable effect level

NOELR: no observable effect loading rate NZIOC: New Zealand Inventory of Chemicals

OECD: Organisation for Economic Co-operation and Development

OEL: Occupational exposure limit

OELV: Occupational exposure limit value

OES: Occupational exposure standards

PBT: Persistent, Bioaccumulative and Toxic

PC: Product Category

PEC: Predicted environmental concentration



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PICCS: Philippine Inventory of Chemicals and Chemical Substances

PNEC: predicted no effect concentration PNEC: Predicted no effect concentration pOW: Octanol-water partition coefficient

PROC: Process Category

REACH: Registration, Evaluation, Autohorisation and Restriction of Chemicals

RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses

RTECS: Registry of Toxic Effects of Chemical Substances

SAE: Society of Automotive Engineers

STP: Sewage treatment plant

SU: Sector of Use

SUVA: Schweizerische Unfallversicherungsanstalt

SVHC: Substances of very high concern

TA Luft: Technische Anleitung zur Reinhaltung der Luft

ThOD: theoretical oxygen demand TRA: targeted risk assessment

TRG: Technische Regeln Druckgase (Germany)

TRgA: Technische Regeln für gefährliche Arbeitsstoffe(Germany)

TRGS: Technische Regeln für Gefahrstoffe

TRK: Technische Richtkonzentration

TSCA: Toxic Substances Control Act (USA)

UN: United Nations

VbF: Verordnung über brennbare Flüssigkeiten VCI: Verband der Chemischen Industrie e.V.

VDE: Verband der Elektrotechnik, Elektronik und Informtaionstechnik e.V.

VDI: Verein Deutscher Ingenieure

VLEP: Valeurs Limites d'exposition Professionnelle

VOC: Volatile Organic Compound

vPvB: Very persistent and very bioaccumulative

VwVwS: Verwaltungsvorschrift wassergefärdende Stoffe

WEL: Workplace exposure limit WGK: water hazard class (Germany) WHO: World Health Organization

WoE: Weight of Evidence

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: *** The information contained in this safety data sheet is based on our current knowledge and experience and describes the product in terms of safety requirements only. This safety data sheet is neither a Certificate of Analysis (CoA) nor a technical data sheet and must not be confused with a specification agreement and does not have the meaning of warranties of characteristics.

Uses mentioned in this safety data sheet are for general information and do not constitute a contractual agreement on a corresponding nature of the product or on a suitability for intended uses.

It is the responsibility of the recipient of the product to ensure that any property rights and existing laws and regulations are observed.