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1. Identification

Product identifier used on the label

Golpanol® PME

Recommended use of the chemical and restriction on use

Recommended use*: Raw material for the chemical-technical industry Suitable for use in industrial sector: chemical industry

Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: Preparation based on: alcohol
Synonyms: 2-(2-PROPYNYLOXY)ETHANOL
PROPARGYL ALCOHOL ETHYLATE

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Flam. Liq. 4 Flammable liquids
Acute Tox. 2 (Inhalation - vapour) Acute toxicity
Acute Tox. 4 (oral) Acute toxicity

Eye Dam./Irrit. 1 Serious eye damage/eye irritation

STOT SE 3 (irritating to Specific target organ toxicity — single exposure

^{*} The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

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respiratory system)

STOT RE 2 (oral) Specific target organ toxicity — repeated

exposure

Label elements

Pictogram:



Signal Word: Danger

Hazard Statement:

H227 Combustible liquid.

H318 Causes serious eye damage.

H330 Fatal if inhaled. H302 Harmful if swallowed.

H335 May cause respiratory irritation.

H373 May cause damage to organs (Blood) through prolonged or repeated

exposure (oral).

Precautionary Statements (Prevention):

P271 Use only outdoors or in a well-ventilated area.

P260 Do not breathe dust/gas/mist/vapours.

P280 Wear protective gloves and eye/face protection.

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P284 In case of inadequate ventilation wear respiratory protection.

P270 Do not eat, drink or smoke when using this product.

P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P310 Immediately call a POISON CENTER or doctor/physician.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P330 Rinse mouth.

P370 + P378 In case of fire: Use water spray, dry powder or foam for extinction.

Precautionary Statements (Storage):

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection

point.

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

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3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Weight %	Chemical name
107-19-7	1.0 - 3.0%	prop-2-yn-1-ol
3973-18-0	75.0 - 85.0%	ethyleneglycolpropargylether

4. First-Aid Measures

Description of first aid measures

General advice:

First aid personnel should pay attention to their own safety. Use adequate protective clothing, protective gloves, eye protection and respiratory protection. Remove affected person from danger area. Immediately remove contaminated clothing. Immediate medical attention required. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position).

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: dry powder, alcohol-resistant foam

Special hazards arising from the substance or mixture

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Hazards during fire-fighting:

toxic gases/vapours, carbon oxides

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Can release flammable vapours. Wind direction should be noted. Avoid all sources of ignition: heat, sparks, open flame. Use antistatic tools.

Environmental precautions

Notify proper authorities. Do not discharge into drains/surface waters/groundwater. Substance/product is RCRA hazardous due to its properties.

Methods and material for containment and cleaning up

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with regulations.

For large amounts: Dike spillage. Cover with blanket of foam (alcohol-resistant foam). Pump off product.

Place absorbed material in the same container as the spilled substance/product for disposal.

7. Handling and Storage

Precautions for safe handling

Wear recommended respiratory protection during weighing or charging. Ensure thorough ventilation of stores and work areas. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid vapor formation. Avoid inhalation of mists/vapours. Avoid contact with the skin, eyes and clothing. The substance/ product may be handled only by appropriately trained personnel.

Protection against fire and explosion:

The product is combustible. Vapours may form explosive mixture with air. Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame. If exposed to fire, keep containers cool by spraying with water. If delivered in plastic packing, highest permissable emptying temperature is 5 Kelvin below the flash point.

Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Low density polyethylene (LDPE), Stainless steel 1.4301 (V2), Stainless steel 1.4401, glass, High density polyethylene (HDPE), Aluminium, Carbon steel (Iron) Unsuitable materials for containers: Paper/Fibreboard

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Protect from the effects of light. Protect from air. Protect against heat.

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8. Exposure Controls/Personal Protection

Components with occupational exposure limits

prop-2-yn-1-ol OSHA PEL TWA value 1 ppm 2 mg/m3 ; SKIN_FINAL ;

The substance can be absorbed through the skin.

ACGIH TLV Skin Designation;

The substance can be absorbed through the skin.

TWA value 1 ppm;

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release.

Suitable respiratory protection for higher concentrations or long-term effect: Self-contained breathing apparatus.

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Remove contaminated clothing.

9. Physical and Chemical Properties

Form: liquid

Odour: pungent odour
Odour threshold: not determined
Colour: colourless to yellow

pH value: 4 - 7.5 (DIN ISO 976)

(100 g/l, 23 °C)

Freezing point: not determined Boiling range: 150 - 200 °C

Flash point: 81 °C (DIN 51758)

Flammability: hardly combustible

Lower explosion limit: For liquids not relevant for

classification and labelling. The lower explosion point may be 5 - 15 °C

below the flash point.

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Upper explosion limit: For liquids not relevant for

classification and labelling.

Autoignition: > 200 °C (DIN 51794)

Vapour pressure: 0.329 - 0.367 hPa

(21.2 °C) 1.80 hPa (42.3 °C)

Density: 1.02 - 1.04 g/cm3 (DIN 51757)

(23 °C)

Relative density: No data available. Vapour density: not determined

Partitioning coefficient n- -0.7 (calculated)

octanol/water (log Pow):

Self-ignition not self-igniting

temperature:

Thermal decomposition: 220 °C

Viscosity, dynamic: not determined Viscosity, kinematic: < 100 mm2/s

(20°C)

Particle size: The substance / product is marketed

or used in a non solid or granular

form.

Solubility in water: completely soluble

Solubility (qualitative): soluble

solvent(s): polar solvents,

Evaporation rate: Value can be approximated from

Henry's Law Constant or vapor

pressure.

Other Information: If necessary, information on other physical and chemical

parameters is indicated in this section.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties: not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Reacts with strong acids and alkalies. Reacts with strong bases and heavy-metal salts. Reacts with oxidizing agents.

Conditions to avoid

Avoid light. Avoid contact with air. Avoid heat. See MSDS section 7 - Handling and storage.

Incompatible materials

strong acids, strong bases, heavy metal salts, oxidizing agents

Hazardous decomposition products

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Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

220 °C

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of moderate toxicity after single ingestion. Of high toxicity after short-term inhalation. Virtually nontoxic after a single skin contact. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Information on: ethyleneglycolpropargylether

Assessment of acute toxicity:Of low toxicity after single ingestion. Virtually nontoxic after a single skin contact. The inhalation of a highly enriched/saturated vapor-air-mixture represents a potential acute hazard.

Oral

Type of value: LD50 Species: rat (male/female)

Value: > 300 - 2,000 mg/kg (OECD Guideline 401)

Analogous: Assessment derived from products with similar chemical character.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Inhalation

Type of value: LC50 Species: rat (male/female)

Value: > 0.5 - 2 mg/l (similar to OECD guideline 403)

Exposure time: 8 h

Dermal

Type of value: LD50 Species: rat (male/female)

Value: > 2,000 mg/kg (OECD Guideline 402)

Analogous: Assessment derived from products with similar chemical character.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Assessment other acute effects

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

Target organ: Lung

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Skin

Species: rabbit Result: non-irritant

Method: OECD Guideline 404

Analogous: Assessment derived from products with similar chemical character.

The product has not been tested. The statement has been derived from substances/products of a

similar structure or composition.

Eye

Species: rabbit

Result: Risk of serious damage to eyes.

Method: OECD Guideline 405

Analogous: Assessment derived from products with similar chemical character.

The product has not been tested. The statement has been derived from substances/products of a

similar structure or composition.

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The substance may lead to shifts in blood composition following repeated exposure in animal experiments. The substance may cause damage to the liver after repeated ingestion of high doses, as shown in animal studies. The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies. The substance may cause damage to the testes after repeated ingestion of high doses, as shown in animal studies. Repeated exposure to large quantities may affect certain organs.

Information on: ethyleneglycolpropargylether

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance induced chromosomal aberrations in a mammalian cell culture test. The substance was not mutagenic in a test with mammals. Results from a number of mutagenicity studies with microorganisms are available. Taking into account all of the information, there is no indication that the substance is mutagenic. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity: No data available.

None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Teratogenicity

Assessment of teratogenicity: No data available.

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Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., (Further) symptoms and / or effects are not known so far

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish

LC50 (96 h) > 100 mg/l, Leuciscus idus

Aquatic invertebrates

No observed effect concentration (48 h) > 1 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Analogous: Assessment derived from products with similar chemical character.

Aquatic plants

No observed effect concentration (72 h) > 1 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)

Analogous: Assessment derived from products with similar chemical character.

Chronic toxicity to fish

No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Assessment of terrestrial toxicity

No data available concerning terrestrial toxicity.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN 38412 Part 8 static

bacterium/EC50 (17 h): > 1,000 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Readily biodegradable (according to OECD criteria).

Elimination information

> 60 % CO2 formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, predominantly domestic sewage, non-adapted) Readily biodegradable (according to OECD criteria).

Mobility in soil

Assessment transport between environmental compartments

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The substance will slowly evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is possible.

Additional information

Sum parameter

Chemical oxygen demand (COD): 1,930 mg/g

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. Do not release untreated into natural waters.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

Container disposal:

WARNING: Empty containers may still contain hazardous residue.

14. Transport Information

Land transport

USDOT

Hazard class: 6.1
Packing group: III
ID number: UN 2810
Hazard label: 6.1

Proper shipping name: TOXIC LIQUID, ORGANIC, N.O.S. (contains PROP-2-YN-1-OL,

ETHOXYLATED)

Sea transport

IMDG

Hazard class: 6.1
Packing group: III
ID number: UN 2810
Hazard label: 6.1
Marine pollutant: NO

Proper shipping name: TOXIC LIQUID, ORGANIC, N.O.S. (contains PROP-2-YN-1-OL,

ETHOXYLATED)

Air transport

IATA/ICAO

Hazard class: 6.1
Packing group: III
ID number: UN 2810
Hazard label: 6.1

Proper shipping name: TOXIC LIQUID, ORGANIC, N.O.S. (contains PROP-2-YN-1-OL,

ETHOXYLATED)

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15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

EPCRA 313:

<u>CAS Number</u> <u>Chemical name</u> 107-19-7 prop-2-yn-1-ol

 CERCLA RQ
 CAS Number
 Chemical name

 1000 LBS
 107-19-7
 prop-2-yn-1-ol

 100 LBS
 50-00-0
 Formaldehyde

 10 LBS
 75-21-8
 Ethylene Oxide

State regulations

State RTK	<u>CAS Number</u>	Chemical name
NJ	107-19-7	prop-2-yn-1-ol
PA	107-19-7	prop-2-yn-1-ol
	75-21-8	Ethylene Oxide

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including ETHYLENE OXIDE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes:

Health: 3 Fire: 2 Reactivity: 0 Special:

HMIS III rating

Health: 3^m Flammability: 2 Physical hazard:0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2018/11/09

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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