

Safety Data Sheet

Golpanol® DEP

Revision date : 2015/05/13

Version: 2.0

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(30042695/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Golpanol® DEP

Recommended use of the chemical and restriction on use

Suitable for use in industrial sector: chemical industry

* 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.

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

Molecular formula: C₇H₁₁ 3N
Synonyms: N,N-DIETHYL-2-PROPYN-1-AMINE

2. Hazards Identification

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

Classification of the product

| | | |
|-------------------|-------------------------|--|
| Flam. Liq. | 2 | Flammable liquids |
| Acute Tox. | 3 (Inhalation - vapour) | Acute toxicity |
| Acute Tox. | 4 (oral) | Acute toxicity |
| Acute Tox. | 3 (dermal) | Acute toxicity |
| Skin Corr./Irrit. | 1B | Skin corrosion/irritation |
| Eye Dam./Irrit. | 1 | Serious eye damage/eye irritation |
| Repr. | 2 (unborn child) | Reproductive toxicity |
| Aquatic Acute | 3 | Hazardous to the aquatic environment - acute |

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Aquatic Chronic

3

Hazardous to the aquatic environment - chronic

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:

| | |
|------|--|
| H225 | Highly flammable liquid and vapour. |
| H311 | Toxic in contact with skin. |
| H331 | Toxic if inhaled. |
| H302 | Harmful if swallowed. |
| H361 | Suspected of damaging the unborn child. |
| H314 | Causes severe skin burns and eye damage. |
| H402 | Harmful to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary Statements (Prevention):

| | |
|------|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P261 | Avoid breathing vapours. |
| P243 | Take precautionary measures against static discharge. |
| P260 | Do not breathe mist or vapour. |
| P273 | Avoid release to the environment. |
| P260 | Do not breathe dust or mist. |
| P201 | Obtain special instructions before use. |
| P241 | Use explosion-proof electrical/ventilating/lighting/equipment. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P264 | Wash with plenty of water and soap thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P242 | Use only non-sparking tools. |
| P240 | Ground/bond container and receiving equipment. |

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. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P361 + P364 | Remove/Take off immediately all contaminated clothing and wash before reuse. |
| P301 + P330 + P331 | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. |
| P370 + P378 | In case of fire: Use foam or dry powder for extinction. |

Precautionary Statements (Storage):

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P403 + P235 Store in a well-ventilated place. Keep cool.
P233 Keep container tightly closed.
P405 Store locked up.

Precautionary Statements (Disposal):

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

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Emergency overview

DANGER:

FLAMMABLE LIQUID.

CORROSIVE LIQUID.

Toxic by inhalation.

TOXIC ON SKIN CONTACT.

TOXIC - ORAL.

TOXIC IF SWALLOWED.

CORROSIVE TO SKIN.

RISK OF SERIOUS DAMAGE TO EYES.

CAUSES RESPIRATORY TRACT IRRITATION.

Avoid contact with the skin, eyes and clothing.

Use with local exhaust ventilation.

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

Wear NIOSH-certified chemical goggles.

Wear protective clothing.

Wear chemical resistant protective gloves.

Eye wash fountains and safety showers must be easily accessible.

3. Composition / Information on Ingredients

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

| <u>CAS Number</u> | <u>Content (W/W)</u> | <u>Chemical name</u> |
|-------------------|----------------------|-----------------------------|
| 4079-68-9 | 90.0 - 100.0 % | N,N-diethyl-2-propynylamine |
| 108-88-3 | 0.0 - 0.7 % | Toluene |
| 109-89-7 | 0.0 - 0.3 % | diethylamine |

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

| <u>CAS Number</u> | <u>Content (W/W)</u> | <u>Chemical name</u> |
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4. First-Aid Measures

Description of first aid measures

General advice:

Immediately remove contaminated clothing. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). First aid personnel should pay attention to their own safety.

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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:

Wash affected areas with water while removing contaminated clothing. Seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open. Seek medical attention.

If swallowed:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, 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.

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:
foam, dry powder

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

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 self-contained breathing apparatus and chemical-protective clothing.

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.

Impact Sensitivity:

Remarks:

No data available.

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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

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:

Substance/product is capable of accumulating a static charge which could act as an ignition source. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Render equipment and apparatus inert (nitrogen, inert gases) and ground before putting into operation.

Conditions for safe storage, including any incompatibilities

Segregate from strong acids. Segregate from strong bases. Segregate from heavy-metal salts. Segregate from strong oxidizing agents.

Further information on storage conditions: Keep container tightly closed and in a cool place. Protect from temperatures above: 50 °C

8. Exposure Controls/Personal Protection

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

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 based on level of activity and exposure.

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General safety and hygiene measures:

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: | amine-like | |
| Odour threshold: | | No data available. |
| Colour: | colourless | |
| pH value: | 9 - 11 | (10 g/l, 23 °C) (DIN ISO 976) |
| solidification temperature: | approx. -32 °C | (DIN ISO 3013) |
| boiling temperature: | 118 - 121 °C | |
| Flash point: | 14 °C | (DIN 51755) |
| Flammability: | Highly flammable. | |
| Lower explosion limit: | 1.0 %(V) | |
| Upper explosion limit: | 7.6 %(V) | |
| Autoignition: | > 200 °C | (DIN 51794) |
| Vapour pressure: | 16.7 mbar | (20 °C) |
| Density: | 0.75 - 0.85 g/cm3 | (20 °C) (DIN 51757) |
| Relative density: | | No data available. |
| Vapour density: | | not determined |
| Partitioning coefficient n-octanol/water (log Pow): | 1.17 | (25 °C) |
| Thermal decomposition: | 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: | approx. 30 g/l | (25 °C) |
| Solubility (qualitative): | soluble | |
| | solvent(s): polar solvents, | |
| Evaporation rate: | | No data available. |

10. Stability and Reactivity

Reactivity

Corrosion to metals:

No corrosive effect on metal.

Formation of flammable gases: Remarks:

Forms no flammable gases in the presence of water.

Chemical stability

Possibility of hazardous reactions

Reacts with alkalis. Reacts with acids. Reacts with heavy metal salts. Reacts with oxidizing agents.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame.

Avoid humidity. See MSDS section 7 - Handling and storage.

Incompatible materials

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

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

not determined

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

Oral

Type of value: LD50

Species: rat

Value: 470 mg/kg

Inhalation

Type of value: LC50

Species: rat

Value: 2.1 mg/l

Exposure time: 4 h

The vapour was tested.

Dermal

Type of value: LD50

Species: rabbit

Value: 500 mg/kg

Assessment other acute effects

Assessment of STOT single:

The toxicity of the product is based on its corrosivity.

Skin

Species: rabbit

Result: Corrosive.

Method: BASF-Test

Eye

Result: Risk of serious damage to eyes.

Sensitization

Assessment of sensitization: No reliable data was available concerning sensitization. As the substance is corrosive, conducting sensitization studies is not feasible.

Chronic Toxicity/Effects

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Repeated dose toxicity

Assessment of repeated dose toxicity: No data available.

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

12. Ecological Information

Toxicity

Toxicity to fish

LC50 (96 h) 10 - 100 mg/l, *Leuciscus idus*

Aquatic invertebrates

EC50 (48 h) > 100 mg/l

Aquatic plants

EC50 (72 h) 10 - 100 mg/l

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 EC10 (17 h): 770 mg/l

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Persistence and degradability

Elimination information

70 - 80 % DOC reduction (28 d) (OECD 301E; 84/449/EEC, C.3) (aerobic, municipal sewage treatment plant effluent)

Assessment of stability in water

According to structural properties, hydrolysis is not expected/probable.

Bioaccumulative potential

Assessment bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

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Bioaccumulation potential

No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).

Mobility in soil

Assessment transport between environmental compartments

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): 1,640 mg/g

13. Disposal considerations

Waste disposal of substance:

Must be disposed of or incinerated in accordance with local regulations.

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

RCRA: D001

D002

14. Transport Information

Land transport

USDOT

| | |
|-----------------------|---|
| Hazard class: | 6.1 |
| Packing group: | I |
| ID number: | UN 3489 |
| Hazard label: | 6.1, 3, 8 |
| Proper shipping name: | TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. (contains N,N-DIETHYL-2-PROPINYLAMINE) |

Sea transport

IMDG

| | |
|-----------------------|---|
| Hazard class: | 6.1 |
| Packing group: | I |
| ID number: | UN 3489 |
| Hazard label: | 6.1, 3, 8 |
| Marine pollutant: | NO |
| Proper shipping name: | TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. (contains N,N-DIETHYL-2-PROPINYLAMINE) |

Air transport

IATA/ICAO

| | |
|----------------|-----|
| Hazard class: | 6.1 |
| Packing group: | I |

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| | |
|-----------------------|--|
| ID number: | UN 3489 |
| Hazard label: | 6.1, 3, 8 |
| Proper shipping name: | TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. (contains N,N-DIETHYL-2-PROPINYLAMINE) |

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories):

Acute; Fire; Sudden release of pressure

CERCLA RQ

1000 LBS

100 LBS

CAS Number

108-88-3

109-89-7

Chemical name

Toluene

diethylamine

State regulations

State RTK

MA, NJ, PA

MA, NJ, PA

CAS Number

108-88-3

109-89-7

Chemical name

Toluene

diethylamine

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:

Health : 3 Fire: 3 Reactivity: 0 Special:

HMIS III rating

Health: 3 Flammability: 3 Physical hazard: 0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2015/05/13

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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