

# Safety Data Sheet

## Golpanol® HD

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Version: 5.0

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(30042696/SDS\_GEN\_CA/EN)

### 1. Identification

#### Product identifier used on the label

## Golpanol® HD

#### Recommended use of the chemical and restriction on use

Recommended use\*: chemical for industrial metal-working

Recommended use\*: Raw material

\* 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 Canada Inc.

5025 Creekbank Road

Building A, Floor 2

Mississauga, ON, L4W 0B6, CANADA

Telephone: +1 289 360-1300

#### Emergency telephone number

CHEMTREC: 1-800-424-9300

BASF HOTLINE: (800) 454-COPE (2673)

#### Other means of identification

Chemical family: diols

Synonyms: 3-HEXYNE-2,5-DIOL SOLUTION

### 2. Hazards Identification

#### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

#### Classification of the product

Acute Tox.	3 (oral)	Acute toxicity
Skin Corr./Irrit.	2	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Skin Sens.	1	Skin sensitization
STOT RE	2	Specific target organ toxicity — repeated

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Aquatic Acute 2  
Aquatic Chronic 2

exposure  
Hazardous to the aquatic environment - acute  
Hazardous to the aquatic environment - chronic

### Label elements

Pictogram:



Signal Word:  
Danger

Hazard Statement:

H318 Causes serious eye damage.  
H315 Causes skin irritation.  
H301 Toxic if swallowed.  
H317 May cause an allergic skin reaction.  
H373 May cause damage to organs (Blood) through prolonged or repeated exposure.  
H401 Toxic to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear protective gloves and eye/face protection.  
P273 Avoid release to the environment.  
P260 Do not breathe dust/gas/mist/vapours.  
P264 Wash with plenty of water and soap thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P303 + P362 IF ON SKIN (or hair): Wash with plenty of soap and water.  
P330 Rinse mouth.  
P362 + P364 Take off contaminated clothing and wash it before reuse.  
P391 Collect spillage.

Precautionary Statements (Storage):

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.

### Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 1 %

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### 3. Composition / Information on Ingredients

#### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
3031-66-1	>= 75.0 - <= 100.0%	hex-3-yne-2,5-diol

### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

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

##### 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.
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### 5. Fire-Fighting Measures

#### Extinguishing media

Suitable extinguishing media:  
water spray, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:  
water jet

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### Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours, carbon oxides, nitrogen oxides

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

### Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

### Further information:

The degree of risk is governed by the burning substance and the fire conditions. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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## 6. Accidental release measures

### Further accidental release measures:

High risk of slipping due to leakage/spillage of product.

### Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures, see section 8. Avoid contact with the skin, eyes and clothing.

### Environmental precautions

Do not discharge into drains/surface waters/groundwater.

### 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: Pump off product.

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

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## 7. Handling and Storage

### Precautions for safe handling

No special measures necessary provided product is used correctly.

### 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.

Suitable materials for containers: Low density polyethylene (LDPE), Galvanized carbon steel (Zinc), glass, High density polyethylene (HDPE), Aluminium, tinned carbon steel (Tinplate), Carbon steel (Iron)

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

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## 8. Exposure Controls/Personal Protection

No occupational exposure limits known.

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### 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.

### General safety and hygiene measures:

Wearing of closed work clothing is required additionally to the stated personal protection equipment.  
Wash soiled clothing immediately.

## 9. Physical and Chemical Properties

Form:	liquid	
Odour:	product specific	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
Colour:	yellowish clear	
pH value:	3.5 - 6.5 ( 100 g/l, 23 °C)	(DIN ISO 976)
solidification temperature:	approx. 6 °C ( 1,013 hPa)	(DIN ISO 3013)
Boiling point:	115 °C ( 1,013 hPa)	
Flash point:	A flash point determination is unnecessary due to the high water content. Aqueous preparation	
Flammability:	hardly combustible	
Lower explosion limit:	For liquids not relevant for classification and labelling.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	> 200 °C	(DIN 51794)
Vapour pressure:	20 mbar ( 20 °C) 100 mbar ( 50 °C)	
Density:	1.01 - 1.03 g/cm3 ( 23 °C)	(DIN 51757)
Relative density:	1.02 ( 20 °C)	
Vapour density:	not determined	
Partitioning coefficient n- octanol/water (log Pow):	-0.24 ( 25 °C) Information based on the main components.	

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Self-ignition temperature:	not self-igniting
Thermal decomposition:	150 °C Thermal decomposition above the indicated temperature is possible.
Viscosity, dynamic:	not determined
Viscosity, kinematic:	< 100 mm <sup>2</sup> /s ( 20 °C)
Particle size:	The substance / product is marketed or used in a non solid or granular form.
Solubility in water:	soluble
Miscibility with water:	miscible
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 alkalis. Reacts with acids. Reacts with heavy metal salts. Reacts with oxidizing agents. Exothermic reaction.

### Conditions to avoid

See MSDS section 7 - Handling and storage.

### Incompatible materials

strong alkalis, acids, heavy metal salts

### Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

150 °C

Thermal decomposition above the indicated temperature is possible.

## 11. Toxicological information

### Primary routes of exposure

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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: Toxic if swallowed.

#### Oral

Type of value: ATE

Species: rat

Value: > 50 - 300 mg/kg (calculated)

*Information on: hex-3-yne-2,5-diol*

*Type of value: LD50*

*Species: rat*

*Value: approx. 140 mg/kg (BASF-Test)*

#### Inhalation

*Information on: hex-3-yne-2,5-diol*

*Type of value: LC0*

*Species: rat*

*Value: 0.005 mg/l (BASF-Test)*

*Exposure time: 8 h*

*The vapour was tested.*

*Inhalation-risk test (IRT): No mortality within 8 hours as shown in animal studies. The inhalation of a highly saturated vapor-air mixture represents no acute hazard.*

#### Dermal

Type of value: ATE

Species: rat

Value: > 2,000 mg/kg (calculated)

Type of value: ATE

Value: > 5,000 mg/kg

*Information on: hex-3-yne-2,5-diol*

*Type of value: LD50*

*Species: rat (male/female)*

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

#### Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

#### Irritation / corrosion

Assessment of irritating effects: Causes serious eye damage. Causes skin irritation. May cause irritations to the respiratory tract.

#### Skin

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*Information on: hex-3-yne-2,5-diol*  
*Species: rabbit*  
*Result: Irritant.*  
*Method: BASF-Test*  
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### Eye

*Information on: hex-3-yne-2,5-diol*  
*Species: rabbit*  
*Result: Risk of serious damage to eyes.*  
*Method: BASF-Test*  
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### Sensitization

Assessment of sensitization: Caused skin sensitization in animal studies.

*Information on: hex-3-yne-2,5-diol*  
*Mouse Local Lymph Node Assay (LLNA)*  
*Species: mouse*  
*Result: sensitizing*  
*Method: OECD Guideline 429*  
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### Aspiration Hazard

No aspiration hazard expected.

## **Chronic Toxicity/Effects**

### Repeated dose toxicity

Assessment of repeated dose toxicity: Repeated ingestion may cause effects in the stomach which can be seen as destruction of the stomach lining.  
Repeated exposure may affect certain organs. Damages blood cells.

*Information on: hex-3-yne-2,5-diol*  
*Assessment of repeated dose toxicity: Repeated ingestion may cause effects in the stomach which can be seen as destruction of the stomach lining.*  
*Repeated exposure may affect certain organs. Damages blood cells.*  
-----

### Genetic toxicity

Assessment of mutagenicity: Based on available Data, the classification criteria are not met.

*Information on: hex-3-yne-2,5-diol*  
*Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance induced chromosomal aberrations in a mammalian cell culture test. The substance was not mutagenic in studies with mammals.*  
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### Carcinogenicity

Assessment of carcinogenicity: No data available.

### Reproductive toxicity

Assessment of reproduction toxicity: Based on available Data, the classification criteria are not met.



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*Information on: hex-3-yne-2,5-diol*

*Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.*

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### Teratogenicity

Assessment of teratogenicity: Based on available Data, the classification criteria are not met.

*Information on: hex-3-yne-2,5-diol*

*Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.*

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### Other Information

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

## 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

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## 12. Ecological Information

### Toxicity

#### Toxicity to fish

LC50 (96 h) > 100 mg/l, *Leuciscus idus* (DIN 38412 Part 15)

#### Aquatic invertebrates

EC50 (48 h) > 100 mg/l, *Daphnia magna* (DIN 38412 Part 11)

#### Aquatic plants

EC50 (48 h) > 1 - 10 mg/l (growth rate), *Pseudokirchneriella subcapitata* (Algal growth inhibition test) acute Effect

EC10 (48 h) > 0.1 - 1 mg/l (growth rate), *Pseudokirchneriella subcapitata* (Algal growth inhibition test)

long-term effect

#### Chronic toxicity to fish

No data available.

#### Chronic toxicity to aquatic invertebrates

No data available.

## Microorganisms/Effect on activated sludge

### Toxicity to microorganisms

*Information on: hex-3-yne-2,5-diol*

*DIN 38412 Part 8 aquatic*

*bacterium/EC10 (7 h): 70.9 mg/l*

*Nominal concentration.*

*DIN 38412 Part 8 aquatic*

*EC50 (7 h): 1,160 mg/l*

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*Nominal concentration.*  
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### Persistence and degradability

Assessment biodegradation and elimination (H2O)

Not readily biodegradable (by OECD criteria).

Assessment biodegradation and elimination (H2O)

*Information on: hex-3-yne-2,5-diol*

*Not readily biodegradable (by OECD criteria).*  
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### Bioaccumulative potential

Assessment bioaccumulation potential

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

### Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

### Additional information

Sum parameter

Chemical oxygen demand (COD): 1,780 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:

The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components. Do not allow to enter soil, waterways or waste water channels.

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## 13. Disposal considerations

### Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

### Container disposal:

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

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## 14. Transport Information

**Land transport**

TDG

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Hazard class: 6.1  
Packing group: III  
ID number: UN 2810  
Hazard label: 6.1, EHSM  
Proper shipping name: TOXIC LIQUID, ORGANIC, N.O.S. (contains HEX-3-YNE-2,5-DIOL)

### Sea transport

#### IMDG

Hazard class: 6.1  
Packing group: III  
ID number: UN 2810  
Hazard label: 6.1, EHSM  
Marine pollutant: YES  
Proper shipping name: TOXIC LIQUID, ORGANIC, N.O.S. (contains HEX-3-YNE-2,5-DIOL)

### 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 HEX-3-YNE-2,5-DIOL)

## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical DSL, CA released / listed

#### NFPA Hazard codes:

Health: 3 Fire: 1 Reactivity: 0 Special:

## 16. Other Information

### SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2019/07/24

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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