

**Dihydrorosan®** 

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Version: 5.0 (30035075/SDS\_GEN\_US/EN)

#### 1. Identification

#### Product identifier used on the label

# **Dihydrorosan®**

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

Recommended use\*: Chemical, Chemical for detergents, Chemical for soaps, detergents and cosmetic

Unsuitable for use: Not intended for sale to or use by the general public.

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

<u>Company:</u>
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

## **Emergency telephone number**

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357) **Other means of identification** 

Synonyms: Tetrahydro-2-isobutyl-4-methyl-2H-pyran

#### 2. Hazards Identification

#### According to Regulation 2024 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### Classification of the product

Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic
Fig. 1. 12.	4	Figure 1. L. P. C. L.

Flam. Liq. 4 Flammable liquids Skin Irrit. 2 Skin irritation

<sup>\*</sup> 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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#### Label elements

#### Pictogram:



# Signal Word: Warning

#### Hazard Statement:

H227 Combustible liquid.
H315 Causes skin irritation.
H402 Harmful to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

#### Precautionary Statements (Prevention):

P280 Wear protective gloves and eye protection or face protection.
P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P273 Avoid release to the environment.

P264 Wash contaminated body parts thoroughly after handling.

#### Precautionary Statements (Response):

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P332 + P313 If skin irritation occurs: Get medical attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P370 + P378 In case of fire: Use alcohol-resistant foam, carbon dioxide, dry powder

or water spray for extinction.

### Precautionary Statements (Storage):

P403 Store in a well-ventilated place.

# Precautionary Statements (Disposal):

P501 Dispose of contents/container in accordance with local regulations.

#### Hazards not otherwise classified

No data available.

## 3. Composition / Information on Ingredients

### According to Regulation 2024 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

2-(2-Methylpropyl)-4-methyltetrahydropyran

CAS Number: 13477-62-8 Content (W/W): 80.0 - 100.0% Synonym: No data available.

The actual concentration is withheld as a trade secret.

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#### 4. First-Aid Measures

## **Description of first aid measures**

#### **General advice:**

Remove contaminated clothing immediately and clean before re-use or dispose it if necessary.

#### If inhaled

Keep patient calm, remove to fresh air, seek medical attention.

#### If on skin:

Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. Seek medical attention.

#### If in eyes:

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: Overexposure may cause:, Eye irritation, skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

#### Indication of any immediate medical attention and special treatment needed

#### Note to physician

Treatment: T

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

## 5. Fire-Fighting Measures

# **Extinguishing media**

Suitable extinguishing media:

water spray, dry powder, alcohol-resistant foam, carbon dioxide

Unsuitable extinguishing media for safety reasons: water jet

#### Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours, carbon oxides

The substances/groups of substances mentioned can be released in case of fire. Combustible Liquid

### Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus.

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#### Further information:

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. Cool endangered containers with water-spray.

#### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures, see section 8. Ensure adequate ventilation. Do not breathe vapour/spray. Avoid contact with the skin, eyes and clothing.

#### **Environmental precautions**

Do not discharge into drains/surface waters/groundwater. Inform authorities in the event of product spillage to water courses or sewage systems.

### Methods and material for containment and cleaning up

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

For residues: Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust).

Dispose of absorbed material in accordance with regulations.

## 7. Handling and Storage

### Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Wear suitable protective clothing and eye/face protection. Avoid contact with the skin, eyes and clothing. Keep container tightly sealed. This product may cause irritations; wash your hands after every contact.

Protection against fire and explosion:

Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame.

### Conditions for safe storage, including any incompatibilities

No applicable information available.

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

## 8. Exposure Controls/Personal Protection

No substance specific occupational exposure limits known.

#### Advice on system design:

No applicable information available.

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#### Personal protective equipment

#### Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Wear a NIOSH-certified (or equivalent) respirator as necessary.

### Hand protection:

Wear chemical resistant protective gloves.

#### Eye protection:

Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

#### **Body protection:**

Body protection must be chosen based on level of activity and exposure.

#### General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Avoid contact with skin. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

## 9. Physical and Chemical Properties

Physical state: liquid
Form: liquid
Odour: flowery
Odour threshold: < 100 ppm
Colour: colourless

pH value: 5.1 - 5.3 (OECD Guideline

(0.13 g/l, 20 °C) 105)

Melting point: < -130 °C (OECD Guideline

(1,013.25 hPa) 102)

glass transition -120 °C (OECD Guideline

temperature: (1,013.25 hPa) 102)

Freezing point: No data available.

Boiling point: 181.9 °C (measured)

(1,013.25 hPa)

Sublimation point: No applicable information available.

Flash point: 62 °C (Directive

92/69/EEC, A.9, closed cup)

Flammability: Combustible liquid. (derived from flash

point)

Lower explosion limit: 0.6 %(V)

For liquids not relevant for

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

below the flash point.

Upper explosion limit: For liquids not relevant for

classification and labelling.

Autoignition: 225 °C (Directive

92/69/EEC, A.15)

Vapour pressure: 1.1 hPa (OECD Guideline

(20 °C) 104)

no

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1.5 hPa (OECD Guideline

(25 °C) 104)

no

7.2 hPa (OECD Guideline

(50 °C) 104)

no

Density: 0.8388 g/cm3

(20°C)

Literature data.

Relative density: 0.8388

(20°C)

Literature data.

Relative vapour density: > 1 (calculated)

(20°C)

Heavier than air.

Partitioning coefficient n- 4.4 - 5.2 (OECD Guideline

octanol/water (log Pow): (25 °C) 117)

Self-ignition Based on its structural properties the temperature: product is not classified as self-

igniting.

Thermal decomposition: approx. 460 °C (DSC (DIN 51007))

Viscosity, dynamic: No data available. Viscosity, kinematic: > 22.6 mm2/s Solubility in water: 0.13 g/l

(20°C)

Solubility (quantitative): No applicable information available.

Solubility (qualitative): soluble

solvent(s): Ethanol,

Molecular weight: No data available.

Evaporation rate: Value can be approximated from

Henry's Law Constant or vapor

pressure.

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular

form.

# 10. Stability and Reactivity

## Reactivity

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

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Formation of Remarks: Forms no flammable gases in the

flammable gases: presence of water.

## **Chemical stability**

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

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## Possibility of hazardous reactions

Generation of flammable gases/vapours.

#### Conditions to avoid

Avoid electro-static discharge. Avoid all sources of ignition: heat, sparks, open flame.

### Incompatible materials

None known during use and storage if used according to instructions.

## **Hazardous decomposition products**

Decomposition products:

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

Thermal decomposition:

approx. 460 °C (DSC (DIN 51007))

# 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: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Oral

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg (BASF-Test)

**Inhalation** 

Type of value: other

Species: rat

Value: 23.1 mg/l (IRT) Exposure time: 7 h The vapour was tested.

Inhalation-risk test (IRT): No mortality within 7 hours as shown in animal studies. The inhalation of a highly saturated vapor-air mixture represents no acute hazard.

**Dermal** 

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg (BASF-Test)

#### Assessment other acute effects

Assessment of STOT single:

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

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#### Irritation / corrosion

Assessment of irritating effects: Skin contact causes irritation. Not irritating to the eyes.

Skin

Species: rabbit Result: Irritant.

Method: OECD Guideline 404

<u>Eye</u>

Species: rabbit Result: non-irritant

Method: OECD Guideline 405

Sensitization

Assessment of sensitization: No sensitizing effect.

**Human Maximization Test** 

Species: human Result: Non-sensitizing. Method: Human patch test

In-vitro test

Species: In vitro assay Result: Non-sensitizing.

Method: OECD Guidelines 442C/D

# Aspiration Hazard No data available.

#### **Chronic Toxicity/Effects**

### Repeated dose toxicity

Assessment of repeated dose toxicity: No substance-specific organioxicity was observed after repeated administration to animals.

#### Genetic toxicity

Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture.

Genetic toxicity in vitro: OECD Guideline 471 Ames-test with and without metabolic activation negative

OECD Guideline 476 HGPRT assay with and without metabolic activation negative OECD Guideline 487 Micronucleus assay with and without metabolic activation negative

#### Carcinogenicity

Assessment of carcinogenicity: No data available concerning carcinogenic effects.

#### Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. The results were determined in a Screening test (OECD 421/422).

#### **Teratogenicity**

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies. The results were determined in a Screening test (OECD 421/422).

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# 12. Ecological Information

#### **Toxicity**

#### Aquatic toxicity

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

#### Toxicity to fish

LC50 (96 h) 77.6 mg/l, Brachydanio rerio (OECD Guideline 203, semistatic)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The statement of the toxic effect relates to the analytically determined concentration.

#### Aquatic invertebrates

EC50 (48 h) 33.2 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The details of the toxic effect relate to the nominal concentration.

#### Aquatic plants

EC50 (72 h) 79.7 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The statement of the toxic effect relates to the analytically determined concentration.

EC10 (72 h) 38.1 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The statement of the toxic effect relates to the analytically determined concentration.

#### 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.

Study scientifically not justified.

#### Soil living organisms

Toxicity to soil dwelling organisms:

Study scientifically not justified.

### Toxicity to terrestrial plants

Study scientifically not justified.

#### Other terrestrial non-mammals

Study scientifically not justified.

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## Microorganisms/Effect on activated sludge

#### Toxicity to microorganisms

OECD Guideline 209 aerobic

activated sludge/EC20 (30 min): approx. 550 mg/l

#### OECD Guideline 209 static

activated sludge, domestic/EC20 (3 h): > 1,000 mg/l

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The details of the toxic effect relate to the nominal concentration.

### Persistence and degradability

#### Assessment biodegradation and elimination (H2O)

Inherently biodegradable. Under enhanced conditions

#### Elimination information

18 % CO2 formation relative to the theoretical value (28 d) (OECD Guideline 310) (aerobic, activated sludge, domestic, non-adapted)

75 % CO2 formation relative to the theoretical value (60 d) (OECD Guideline 310) (aerobic, activated sludge, domestic, non-adapted)
Enhanced conditions: prolonged incubation

#### 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 possible.

#### Bioaccumulation potential

No data available.

# 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**

Other ecotoxicological advice:

No data available.

# 13. Disposal considerations

#### Waste disposal of substance:

Observe national and local legal requirements.

#### Container disposal:

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

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## 14. Transport Information

**Land transport** 

**USDOT** 

Not classified as a dangerous good under transport regulations

Sea transport

**IMDG** 

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

# 15. Regulatory Information

#### **Federal Regulations**

**Registration status:** 

Chemical TSCA, US released / listed

Chemical TSCA, US

All substances are TSCA listed and active.

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

**NFPA Hazard codes:** 

Health: 2 Fire: 2 Reactivity: 0 Special:

**HMIS III rating** 

Health: 2 Flammability: 2 Physical hazard: 0

# Assessment of the hazard classes according to UN GHS criteria (most recent version):

Skin Corr./Irrit. 2 Skin corrosion/irritation Flam. Liq. 4 Flammable liquids

Aquatic Acute 3 Hazardous to the aquatic environment - acute Aquatic Chronic 3 Hazardous to the aquatic environment - chronic

#### 16. Other Information

### SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2025/08/26

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**END OF DATA SHEET**