We create chemistry

Safety Data Sheet
Hydroxyciol

1. Identification

Product identifier used on the label

Hydroxyciol

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.

* 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

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Synonyms: 3,7-Dimethyloctane-1,7-diol

2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2022-272)

Classification of the product

Eye Irrit.	2B	Eye irritation

Label elements

Signal Word:
Warning

Hazard Statement:
H320 Causes eye irritation.

Precautionary Statements (Prevention):
P264 Wash contaminated body parts thoroughly after handling.

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.
P337 + P313 If eye irritation persists: Get medical attention.

Hazards not otherwise classified

No data available.

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2022-272)

3,7-dimethyloctane-1,7-diol
CAS Number: 107-74-4
Content (W/W): 80.0 - 100.0%
Synonym: 3,7-Dimethyloctane-1,7-diol

The actual concentration is withheld as a trade secret.

4. First-Aid Measures

Description of first aid measures

General advice:
Remove contaminated clothing.

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

If on skin:
Wash thoroughly with soap and water

If in eyes:
Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. If irritation develops, seek medical attention.

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

5. Fire-Fighting Measures

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

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
carbon oxides, harmful vapours
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:
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.

Methods and material for containment and cleaning up
For small amounts: Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust).
For large amounts: Dike spillage. Pump off product.
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.

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:
Ensure adequate ventilation.

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. 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 depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Avoid contact with eyes. 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, viscous
Odour:	sweetish, flowery
Odour threshold:	< 100 ppm
Colour:	colourless, clear

pH value:	5.5 (30.1 g/l, 25 °C)	(Directive 92/69/EEC, A.6)
Melting point:	< -100 °C (> 991 - < 997.6 hPa)	
Freezing point:	No data available.	
Boiling point:	> 268 - < 270 °C (> 991 - < 997.6 hPa)	
Sublimation point:	No applicable information available.	
Flash point:	> 93 °C Literature data.	(other, closed cup)
Flammability:	hardly combustible	(derived from flash point)
Lower explosion limit:	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:	360 °C	(Regulation 440/2008/EC, A.15)
SADT:	No data available.	
Vapour pressure:	0.0001 hPa (20 °C) 0.00019 hPa (25 °C) 0.0036 hPa (50 °C)	
Density:	0.929 g/cm3 (20 °C)	(OECD Guideline 109)
Relative density:	0.922 - 0.930 (25 °C)	
Relative vapour density:	> 1 (20 °C) Heavier than air.	(calculated)
Partitioning coefficient n-octanol/water (log Pow):	1.59 (25 °C)	(Directive 84/449/EEC, A.8)
Refractive index:	1.457 - 1.461 (20 °C)	
Self-ignition temperature:	Based on its structural properties the product is not classified as self-igniting.	
Thermal decomposition:	> 200 °C No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	not determined	
Viscosity, kinematic:	> 22.6 mm2/s	
Solubility in water:	30.1 g/l (25 °C)	
Solubility (quantitative):	No applicable information available.	
Solubility (qualitative):	No applicable information available.	
Molecular weight:	174.28 g/mol	
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 applicable information available.
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 flammable gases:	Remarks:	Forms no flammable gases in the presence of water.

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

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

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:
> 200 °C
No decomposition if stored and handled as prescribed/indicated.

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 skin contact. Virtually nontoxic after a single ingestion.

Oral
Type of value: LD50
Species: rat (male/female)
Value: > 5,000 mg/kg
No mortality was observed. Limit concentration test only (LIMIT test).

Inhalation
No applicable information available.

Dermal
Type of value: LD50
Species: rabbit (no data)
Value: > 5,000 mg/kg
No mortality was observed. Limit concentration test only (LIMIT test).

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: Not irritating to the skin. Eye contact causes irritation.

Skin
Species: rabbit
Result: non-irritant
Method: OECD Guideline 404

Eye
Species: rabbit
Result: Irritant.
Method: OECD Guideline 405

Sensitization
Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Mouse ear swelling test (MEST)
Species: mouse
Result: Non-sensitizing.
Method: other

Aspiration Hazard
Lack of data.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: Repeated oral uptake of the substance did not cause substance-related effects.

Genetic toxicity
Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in studies with mammals.

Carcinogenicity
Assessment of carcinogenicity: Not classified, due to lack of data.

Reproductive toxicity
Assessment of reproduction toxicity: Not classified, due to lack of data.

Teratogenicity
Assessment of teratogenicity: Not classified, due to lack of data.

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. 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) approx. 464 mg/l, Brachydanio rerio (OECD Guideline 203, static)
The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates
EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
Limit concentration test only (LIMIT test).

Aquatic plants
No observed effect concentration (72 h) >= 100 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)
The details of the toxic effect relate to the nominal concentration.

EC50 (72 h) > 100 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)
The details of the toxic effect relate to the nominal concentration.

Assessment of terrestrial toxicity
No data available concerning terrestrial toxicity.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms
DIN EN ISO 10712 aquatic
bacterium/EC10 (16 h): 3,310 mg/l
The details of the toxic effect relate to the nominal concentration.

OECD Guideline 209 aerobic
activated sludge, domestic/EC20 (30 min): > 1,000 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H2O)
Readily biodegradable (according to OECD criteria).

Elimination information

70 - 80 % BOD of the ThOD (28 d) (OECD 301F; ISO 9408; 92/69/EWG, C.4-D) (aerobic, activated sludge, domestic)

Assessment of stability in water
Substance is readily biodegradable, therefore hydrolysis is not expected to be relevant.

Information on Stability in Water (Hydrolysis)
Study does not need to be conducted.

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.
The product has not been tested. The statement has been derived from the structure of the product.

Additional information

Other ecotoxicological advice:
No data available.

13. Disposal considerations

Waste disposal of substance:
Dispose of in accordance with national, state and local regulations. Do not discharge into waterways or sewer systems without proper authorization.

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

14. Transport Information

Land transport
TDG

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 DSL, CA released / listed

Chemical DSL, CA

DSL listed and/or otherwise compliant.

NFPA Hazard codes:
Health: 2 Fire: 1 Reactivity: 0 Special:

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

Eye Dam./Irrit.	2B	Serious eye damage/eye irritation

16. Other Information

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

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.

Any other intended applications should be discussed with the manufacturer.
Corresponding occupational protection measurements must be followed.

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END OF DATA SHEET