We create chemistry

Safety data sheet

1. Substance/preparation and manufacturer/supplier identification

Product name:
Hydroxyciol

Use: Chemical, Chemical for detergents, Chemical for soaps, detergents and cosmetic

Manufacturer/supplier:
BASF South East Asia Pte Ltd.
128 Beach Road #18-01
Guoco Midtown, 189773, Singapore
Telephone: +65 8322 4420
Telefax number: +65 6 334-0330
E-mail address: benny.zou@basf.com

Emergency information:
Singapore Emergency Toll-Free Number:
Telephone: 1800-723-1361
International emergency number:
Telephone: +49 180 2273-112

2. Hazard identification

Classification of the substance and mixture:
Eye irritation: Cat.2B

Label elements and precautionary statement:

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.

Other hazards which do not result in classification:
If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/information on ingredients

Chemical nature

Substance nature: Substance

3,7-dimethyloctane-1,7-diol
CAS Number: 107-74-4

Hazardous ingredients

3,7-dimethyloctane-1,7-diol

Content (W/W): >= 75 % - <= 100 %	Eye Irrit.: Cat. 2B
CAS Number: 107-74-4	

3,7-Dimethyl-octen-6-ol-1

Content (W/W): > 0 % - < 0.2 %	Acute Tox.: Cat. 5 (oral)
CAS Number: 106-22-9	Acute Tox.: Cat. 5 (dermal)
	Skin Irrit.: Cat. 2
	Eye Irrit.: Cat. 2A
	Skin Sens.: Cat. 1B
	Aquatic Acute: Cat. 2

7-hydroxycitronellal

Content (W/W): > 0 % - < 0.2 %	Eye Irrit.: Cat. 2A
CAS Number: 107-75-5	Skin Sens.: Cat. 1B
	Aquatic Acute: Cat. 3

4. First-Aid Measures

General advice:
Remove contaminated clothing.

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

On skin contact:
Wash thoroughly with soap and water

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

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

Note to physician:
Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.
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

Specific hazards:
carbon oxides, harmful vapours
The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:
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:
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 for cleaning up or taking 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

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.

Storage

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

8. Exposure controls and personal protection

Components with occupational exposure limits

No substance specific occupational exposure limits known.

Personal protective equipment

Respiratory protection:
Suitable respiratory protection for higher concentrations or long-term effect: Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:
Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.
Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

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:
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

Form:	liquid, viscous	
Colour:	colourless, clear	
Odour:	sweetish, flowery	
Odour threshold:	< 100 ppm	
pH value:	5.5 (30.1 g/l, 25 °C)	(Directive 92/69/EEC, A.6)
Melting point:	< -100 °C (> 991 - < 997.6 hPa)	
Boiling point:	> 268 - < 270 °C (> 991 - < 997.6 hPa)	
Flash point:	> 93 °C Literature data.	(other, closed cup)
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Flammability (solid/gas):	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.	
Ignition temperature:	360 °C	(Regulation 440/2008/EC, A.15)
Thermal decomposition:	> 200 °C No decomposition if stored and handled as prescribed/indicated.	
Self ignition:	Based on its structural properties the product is not classified as self-igniting.	Test type: Spontaneous self-ignition at room-temperature.
Self heating ability:	not applicable, the product is a liquid	
SADT:	No data available.	

Explosion hazard:	Based on the chemical structure there is no indication of explosive properties.	
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.	
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 (air):	> 1 (20 °C) Heavier than air.	(calculated)
Solubility in water:	30.1 g/l (25 °C)	
Partitioning coefficient n-octanol/water (log Pow):	1.59 (25 °C; pH value: 3.8 - 4.8)	(Directive 84/449/EEC, A.8)
Adsorption/water - soil:	KOC: 10; log KOC: 1.0 The product has not been tested. The statement has been derived from the structure of the product.	(calculated)
Surface tension:	Based on chemical structure, surface activity is not to be expected.	
Viscosity, dynamic:	not determined	
Viscosity, kinematic:	No data available.	
Molar mass:	174.28 g/mol	

Particle characteristics

Particle size distribution:	The substance / product is marketed or used in a non solid or granular form. -
Specific Surface Area:	No data available.
Particle Shape:	No data available.
Dustiness:	No data available.

10. Stability and Reactivity

Conditions to avoid:
See SDS section 7 - Handling and storage.

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

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

Corrosion to metals: Corrosive effects to metal are not anticipated.

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

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

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

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

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Experimental/calculated data:
LD50rat (oral): > 5,000 mg/kg
No mortality was observed. Limit concentration test only (LIMIT test).

Acute inhalation toxicity

(by inhalation):No data available.

Acute dermal toxicity

LD50 rabbit (dermal): > 5,000 mg/kg
No mortality was observed. Limit concentration test only (LIMIT test).

Assessment of acute toxicity

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

Symptoms

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Irritation

Assessment of irritating effects:
Not irritating to the skin. Eye contact causes irritation.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: Irritant. (OECD Guideline 405)

Respiratory/Skin sensitization

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

Experimental/calculated data:
Mouse ear swelling test (MEST) mouse: Non-sensitizing. (other)

Germ cell mutagenicity

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.

Experimental/calculated data:
No data available.

Reproductive toxicity

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

Experimental/calculated data:
No data available.

Developmental toxicity

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

Specific target organ toxicity (single exposure)

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

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

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

Experimental/calculated data:
No data available.

Aspiration hazard

Lack of data.

12. Ecological Information

Ecotoxicity

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.

Microorganisms/Effect on activated sludge:
EC10 (16 h) 3,310 mg/l, Pseudomonas putida (DIN EN ISO 10712, aquatic)
The details of the toxic effect relate to the nominal concentration.

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

Chronic toxicity to fish:
No data available.

Chronic toxicity to aquatic invertebrates:
No data available.

Assessment of terrestrial toxicity:

Mobility

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.

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.

Bioaccumulation potential

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

13. Disposal Considerations

Observe national and local legal requirements.

14. Transport Information

Domestic transport:

	Not classified as a dangerous good under transport regulations
UN number or ID number	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Sea transport
IMDG

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
	Marine pollutant: no
Special precautions for user	None known

Air transport
IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number or ID number	Not applicable
Proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

15. Regulatory Information

Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

16. Other Information

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

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.