

SAFETY DATA SHEET

according to the Globally Harmonized System

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Version 1.13	Revision Date: 20.02.2024	SDS Number: R11243	Date of last issue: 17.02.2023 Date of first issue: 03.06.2014
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1. PRODUCT AND COMPANY IDENTIFICATION

Manufacturer or supplier's details

Manufacturer : BODE Chemie GmbH
Melanchthonstraße 27
22525 Hamburg (Germany)
Tel.: +49 (0)40 / 54 00 60

Supplier :

Responsible Department : Scientific Affairs
sds@bode-chemie.de

Emergency telephone number : Poison Center Göttingen
24h-Phone +49 (0)551 / 1 92 40

Recommended use of the chemical and restrictions on use

Recommended use : In-door use
For further information, refer to the product technical data sheet.

Restrictions on use : Restricted to professional users.

2. HAZARDS IDENTIFICATION


GHS Classification

Flammable liquids : Category 2

Serious eye damage/eye irritation : Category 2A

Specific target organ toxicity -
single exposure : Category 3

GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and
other ignition sources. No smoking.
P261 Avoid breathing vapours.

Response:

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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 advice/ attention.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Ethanol	64-17-5	>= 50 - < 70
Propan-2-ol	67-63-0	>= 20 - < 30
propane-1,2-diol	57-55-6	>= 1 - < 10

4. FIRST AID MEASURES

General advice : If you feel unwell, seek medical advice (show the label where possible).
In case of skin contact : No skin irritation
In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
If swallowed : Do NOT induce vomiting.
Rinse mouth.
Most important symptoms and effects, both acute and delayed : Causes serious eye irritation.
May cause drowsiness or dizziness.
Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Hazardous combustion products : No hazardous combustion products are known
Specific extinguishing methods : Standard procedure for chemical fires.
Special protective equipment for firefighters : Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : Should not be released into the environment.
Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).

7. HANDLING AND STORAGE

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Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.

Advice on safe handling : Avoid contact with eyes.

Conditions for safe storage : Store in original container.
Keep tightly closed.

Materials to avoid : Keep away from food and drink.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethanol	64-17-5	STEL	1.000 ppm	ACGIH
Propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Propan-2-ol	67-63-0	Acetone	Urine	End of shift at end of workweek	40 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Protective measures : Not required because of small size of the container.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : green

Odour : alcohol-like

pH : 7,5

Melting point/range : not determined

Boiling point/boiling range : > 80 °C

Flash point : 20 °C

Method: DIN 51755 Part 1

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Flammability (solid, gas)	:	not auto-flammable
Lower explosion limit / Lower flammability limit	:	3,5 %(V)
Vapour pressure	:	No data available
Density	:	0,9 g/cm ³ (20 °C)
Solubility(ies) Water solubility	:	completely miscible

10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	The product is chemically stable.
Possibility of hazardous reactions	:	None reasonably foreseeable.
Conditions to avoid	:	Heat, flames and sparks. Strong sunlight for prolonged periods.
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute dermal toxicity	:	Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method
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Components:

Ethanol (CAS: 64-17-5):

Acute oral toxicity	:	LD50 Oral (Rat): 10.470 mg/kg Method: OECD Test Guideline 401
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Acute inhalation toxicity	:	LC50 (Rat): 51 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403
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Propan-2-ol (CAS: 67-63-0):

Acute oral toxicity	:	LD50 Oral (Rat): > 5.000 mg/kg
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 5.000 mg/kg

propane-1,2-diol (CAS: 57-55-6):

Acute oral toxicity	:	LD50 Oral (Rat): 22.000 mg/kg Method: Calculation method
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Acute dermal toxicity : LD50 Dermal (Rabbit): > 2.000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

Ethanol (CAS: 64-17-5):

Species : human skin
Result : Mild skin irritation
Remarks : Based on available data, the classification criteria are not met.

Propan-2-ol (CAS: 67-63-0):

Species : Rabbit
Result : No skin irritation

propane-1,2-diol (CAS: 57-55-6):

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

Serious eye damage/eye irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

Ethanol (CAS: 64-17-5):

Species : Rabbit
Method : OECD Test Guideline 405
Result : Irritating to eyes.

Propan-2-ol (CAS: 67-63-0):

Species : Rabbit
Result : Eye irritation

propane-1,2-diol (CAS: 57-55-6):

Species : Rabbit
Method : OECD Test Guideline 405
Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Ethanol (CAS: 64-17-5):

Species : Mouse
Method : OECD Test Guideline 429
Result : Does not cause skin sensitisation.

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Propan-2-ol (CAS: 67-63-0):

Test Type : Buehler Test
Species : Guinea pig
Result : Did not cause sensitisation on laboratory animals.

propane-1,2-diol (CAS: 57-55-6):

Test Type : Maximisation Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Components:

Propan-2-ol (CAS: 67-63-0):

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

No data available

Aspiration toxicity

Not classified based on available information.

Experience with human exposure

No data available

Experience with human exposure

No data available

Neurological effects

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Ethanol (CAS: 64-17-5):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 11.200 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 9.268 mg/l
Exposure time: 48 h

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Toxicity to algae/aquatic plants : EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Chlorella vulgaris (Fresh water algae)): 9,6 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Propan-2-ol (CAS: 67-63-0):

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 8.692 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.285 mg/l
Exposure time: 48 h

NOEC (Daphnia magna (Water flea)): 141 mg/l
Exposure time: 16 d

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 10.500 mg/l
Exposure time: 72 h

propane-1,2-diol (CAS: 57-55-6):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 40.613 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Ceriodaphnia (water flea)): 18.340 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 19.000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 201

Persistence and degradability

Components:

Ethanol (CAS: 64-17-5):

Biodegradability : Result: Readily biodegradable.

Propan-2-ol (CAS: 67-63-0):

Biodegradability : Result: rapidly biodegradable

propane-1,2-diol (CAS: 57-55-6):

Biodegradability : Biodegradation: > 70 %

Bioaccumulative potential

Components:

Ethanol (CAS: 64-17-5):

Partition coefficient: n-octanol/water : log Pow: -0,35

Propan-2-ol (CAS: 67-63-0):

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Partition coefficient: n-octanol/water : log Pow: 0,05

propane-1,2-diol (CAS: 57-55-6):

Partition coefficient: n-octanol/water : log Pow: -1,07

Mobility in soil

Components:

Propan-2-ol (CAS: 67-63-0):

Distribution among environmental compartments : Remarks: Mobile in soils

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of as hazardous waste in compliance with local and national regulations.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging : Empty remaining contents.
Store containers and offer for recycling of material when in accordance with the local regulations.

14. TRANSPORT INFORMATION

ADR

UN number : UN 1987
Proper shipping name : ALCOHOLS, N.O.S.
(ethanol, propan-2-ol)
Class : 3
Packing group : II
Labels : 3
Hazard Identification Number : 33
Tunnel restriction code : (D/E)
Limited quantity (LQ) : 1,00 L
Environmentally hazardous : no

UNRTDG

UN number : UN 1987
Proper shipping name : ALCOHOLS, N.O.S.
(ethanol, propan-2-ol)
Class : 3
Packing group : II
Labels : 3
Environmentally hazardous : no

IATA-DGR

UN/ID No. : UN 1987
Proper shipping name : Alcohols, n.o.s.
(ethanol, propan-2-ol)
Class : 3

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Packing group : II
Labels : Flammable Liquids
Packing instruction (cargo aircraft) : 364
Packing instruction (passenger aircraft) : 353

IMDG-Code

UN number : UN 1987
Proper shipping name : ALCOHOLS, N.O.S.
(ethanol, propan-2-ol)
Class : 3
Packing group : II
Labels : 3
EmS Code : F-E, S-D
Limited quantity (LQ) : 1,00 L
Marine pollutant : no

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Other international regulations

The components of this product are reported in the following inventories:

TSCA : All substances listed as active on the TSCA inventory

16. OTHER INFORMATION

Revision Date : 20.02.2024
Date format : yyyy/mm/dd

Safety datasheet sections which have been updated:

- 5. Firefighting measures
- 6. Accidental release measures
- 15. Regulatory information

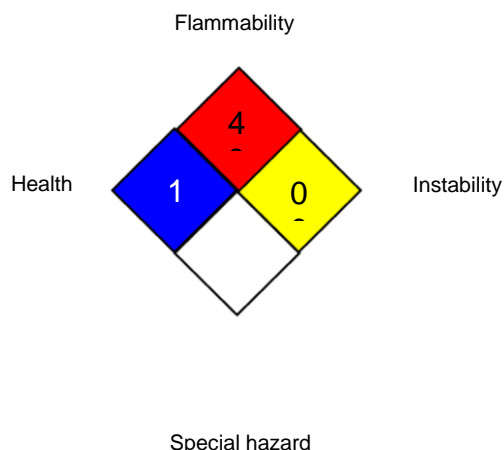
Further information

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NFPA:



HMIS® IV:

HEALTH	/	1
FLAMMABILITY		4
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or

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quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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