

Trade name: Biostab 1 (000121501)

hincide

Revision date: 28.02.2019 Version (Revision): 13.0.1 (13.0.0)

Print date: 01.03.2019

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Biostab 1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Product Categories [PC]

PC 8 - Biocidal product

1.3 Details of the supplier of the safety data sheet

ph-cleantec GmbH Supplier:

Street: Gutenbergstr. 14 Postal code/city: 70736 Fellbach Telephone: 0711 518 0600 Telefax: 0711 518 0994 Information contact: info@ph-cleantec.de

1.4 Emergency telephone number

0711 518 0600 (08:00 - 17:00 Uhr)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4; H302 - Acute toxicity (oral): Category 4; Harmful if swallowed.

Eye Dam. 1; H318 - Serious eye damage/eye irritation: Category 1; Causes serious eye damage.

Skin Sens. 1; H317 - Skin sensitisation: Category 1; May cause an allergic skin reaction.

STOT RE 2; H373 - STOT-repeated exposure: Category 2; May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms







Health hazard (GHS08) · Corrosion (GHS05) · Exclamation mark (GHS07)

Signal word

Hazard components for labelling

ETHANEDIOL; INDEX No.: 603-027-00-1

1,2-BENZISOTHIAZOL-3(2H)-ONE; INDEX No.: 613-088-00-6

Hazard statements

H373 May cause damage to organs through prolonged or repeated exposure.

H318 Causes serious eye damage. H302 Harmful if swallowed.

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> H317 May cause an allergic skin reaction.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P310 Immediately call a POISON CENTER/doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse. P501 Dispose of contents/container according to local regulations

Remark

Use biocides safely. Always read the label and product information before use.

Additional information

P270 - Do not eat, drink or smoke when using this product. P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

BIOCIDES

3.2 Mixtures

Hazardous ingredients

ETHANEDIOL; REACH registration No.: 01-2119456816-28; EC No.: 203-473-3; CAS No.: 107-21-1

Weight fraction: ≥ 10 - < 25 %

Classification 1272/2008 [CLP]: STOT RE 2; H373 Acute Tox. 4; H302 1,2-BENZISOTHIAZOL-3(2H)-ONE; EC No.: 220-120-9; CAS No.: 2634-33-5

Weight fraction: ≥ 5 - < 10 %

Eye Dam. 1; H318 Acute Tox. 4; H302 Skin Irrit. 2; H315 Skin Sens. 1; H317 Classification 1272/2008 [CLP]:

Aquatic Acute 1; H400

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH

This mixture contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH

Additional information

Full text of H- and EUH-phrases; see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove affected person from the danger area and lay down. Never give anything by mouth to an unconscious person or a person with cramps. If unconscious place in recovery position and seek medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician.

In case of skin contact

Change contaminated, saturated clothing. Subsequently wash off with: Water and soap

After eye contact

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> Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Let water be drunken in little sips (dilution effect).

4.2 Most important symptoms and effects, both acute and delayed

Dizziness Headache Impairment of vision Nausea Vomiting

4.3 Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

Co-ordinate fire-fighting measures to the fire surroundings.

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam Carbon dioxide (CO2) Extinguishing powder Water spray

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Protective clothing.

5.4 Additional information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation. See protective measures under point 7 and 8.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Use water spray jet to minimise or disperse vapours.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal. Clear contaminated areas thoroughly.

6.4 Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13 National regulations see section 15.

SECTION 7: Handling and storage



7.1 Precautions for safe handling

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> If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Protective measures

All work processes must always be designed so that the following is excluded: Inhalation of vapours or spray/mists

Measures to prevent fire

Usual measures for fire prevention. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Measures to prevent aerosol and dust generation

Vapours/aerosols should be exhausted directly at the point of origin. Use only in well-ventilated areas.

Environmental precautions

Shafts and sewers must be protected from entry of the product.

7.2 Conditions for safe storage, including any incompatibilities

Hints on joint storage

Storage class (TRGS 510): 12

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

ETHANEDIOL; CAS No.: 107-21-1

Limit value type (country of origin): TRGS 900 (D) Limit value: 10 ppm / 26 mg/m³

Peak limitation: 2(I) Remark: H,Y Version: 07.06.2018 Limit value type (country of origin): STEL (EC)

Limit value: 40 ppm / 104 mg/m³

Remark: Version: 31.01.2018 Limit value type (country of origin): TWA (EC)

Limit value: 20 ppm / 52 mg/m³

Remark:

Version: 31.01.2018

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type: DNEL Consumer (local) (ETHANEDIOL; CAS No.: 107-21-1)

Exposure route: Inhalation Exposure frequency: Long-term Limit value: 7 mg/m^3

Limit value type: DNEL Consumer (systemic) (ETHANEDIOL ; CAS No.: 107-21-1)

Exposure route: Exposure frequency: Long-term Limit value: 53 mg/kg

Limit value type: DNEL worker (local) (ETHANEDIOL; CAS No.: 107-21-1)

Exposure route: Inhalation Exposure frequency: Long-term Limit value: 35 mg/m^3

DNEL worker (systemic) (ETHANEDIOL ; CAS No.: 107-21-1) Limit value type:

Exposure route:

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> Exposure frequency: Long-term Limit value: 106 mg/kg

PNEC

Limit value type: PNEC (Aquatic, freshwater) (ETHANEDIOL; CAS No.: 107-21-1)

Limit value: 10 ma/l

PNEC (Aquatic, intermittent release) (ETHANEDIOL ; CAS No.: 107-21-1) Limit value type:

Limit value: 10 mg/l

Limit value type: PNEC (Aquatic, marine water) (ETHANEDIOL; CAS No.: 107-21-1)

Limit value: 1 mg/l

Limit value type: PNEC (Sediment, freshwater) (ETHANEDIOL; CAS No.: 107-21-1)

Limit value: 20,9 ma/ka

PNEC (Soil) (ETHANEDIOL; CAS No.: 107-21-1) Limit value type:

1,53 mg/kg Limit value:

Limit value type: PNEC (Sewage treatment plant) (ETHANEDIOL ; CAS No. : 107-21-1)

Limit value: 199,5 mg/l

8.2 Exposure controls







Personal protection equipment

Eye/face protection

Eye glasses with side protection

Skin protection

Hand protection

Suitable gloves type: Gloves with long cuffs

Suitable material: CR (polychloroprene, chloroprene rubber)

Breakthrough time: >= 480 min Thickness of the glove material: 0,5 mm Recommended glove articles: EN ISO 374

Additional hand protection measures: Check leak tightness/impermeability prior to use. Do not wear gloves near rotary machines and tools. In the case of wanting to use the gloves again, clean them before taking off and air

Remark: The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these aloves.

Body protection

lab coat Overall Chemical resistant safety shoes Only wear fitting, comfortable and clean protective clothing.

Recommended material: Natural fibres (e.g. cotton) heat-resistant synthetic fibres

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Respiratory protection necessary at: exceeding exposure limit values / aerosol or mist formation.

Suitable respiratory protection apparatus

Filtering device (full mask or mouthpiece) with filter: A-P2

General health and safety measures

Wash hands before breaks and after work. Apply skin care products after work.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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> Appearance: liquid Colour: brown Odour: characteristic Safety relevant basis data

Melting point/melting range: No data available Initial boiling point and boiling approx. (1013 hPa) 100,0 °C

range:

Decomposition temperature: No data available

Flash point: DIN 51755 part 1 none

Ignition temperature: none Oxidising liquids: Not applicable. Lower explosion limit: none Upper explosion limit : none **Explosive properties:** Not applicable.

(20°C) Vapour pressure 20°C): No data available

approx. Density: (20°C) 1.088 a/cm³

Water solubility: (20°C) miscible pH-value: (20 °C / conc.) 8,5 - 10,2

No data available log P O/W: Cinematic viscosity: (40°C) not determined

Odour threshold: No data available

Relative vapour density: (20°C) No data available (air = 1)Vapourisation rate: No data available (Ether = 1)

gem. RL 1999/13/EG Maximum VOC content (EC): (20°C) 0.0 Wt %

9.2 Other information

no more data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under recommended storage and handling conditions(See section 7).

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

None

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Harmful: possible risk of irreversible effects if swallowed.

Acute oral toxicity

Parameter: LD50 (ETHANEDIOL ; CAS No. : 107-21-1)

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> Oral Exposure route: Species: Rat 7712 mg/kg Effective dose:

LD50 (1,2-BENZISOTHIAZOL-3(2H)-ONE; CAS No.: 2634-33-5) Parameter:

Exposure route: Species: Rat Effective dose: 597 mg/kg

Acute dermal toxicity

LD50 (ETHANEDIOL ; CAS No.: 107-21-1) Parameter:

Dermal Exposure route: Species: Mouse Effective dose: > 3500 mg/kg

Parameter: LD50 (1,2-BENZISOTHIAZOL-3(2H)-ONE ; CAS No. : 2634-33-5)

Exposure route: Dermal Effective dose: > 2000 mg/kg

Acute inhalation toxicity

Parameter: LC50 (ETHANEDIOL ; CAS No.: 107-21-1)

Exposure route: Inhalation Species: Rat Effective dose: > 2,5 mg/l Exposure time:

Irritant and corrosive effects

Primary irritation to the skin

Primary irritation to the skin (1,2-BENZISOTHIAZOL-3(2H)-ONE; CAS No.: 2634-33-5 Parameter:)

Species: Rabbit

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

Irritation to eyes

Irritation to eyes (1,2-BENZISOTHIAZOL-3(2H)-ONE; CAS No.: 2634-33-5) Parameter:

Species:

Causes serious eye damage.

Sensitisation

May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

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

Germ cell mutagenicity

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

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

May cause damage to kidneys through prolonged or repeated exposure if swallowed.

Aspiration hazard

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

11.2 Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

11.3 Symptoms related to the physical, chemical and toxicological characteristics

There are no data available on the preparation/mixture itself.

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11.4 Other adverse effects

No information available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

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

Acute (short-term) fish toxicity

LC50 (ETHANEDIOL ; CAS No. : 107-21-1) Parameter: Species: Pimephales promelas (fathead minnow)

Effective dose: 72860 mg/l Exposure time: 96 h Method: statischer Test

Chronic (long-term) fish toxicity

NOEC (ETHANEDIOL; CAS No.: 107-21-1) Parameter: Pimephales promelas (fathead minnow) Species:

Effective dose: 15380 mg/l Exposure time: Acute (short-term) daphnia toxicity

Parameter: EC50 (ETHANEDIOL; CAS No.: 107-21-1)

Species: Daphnia magna (Big water flea)

Effective dose: > 100 mg/l Exposure time: 48 h Method: **OECD 202**

Chronic (long-term) daphnia toxicity

NOEC (ETHANEDIOL; CAS No.: 107-21-1) Parameter:

Species: Ceriodaphnia spec Effective dose: 8590 mg/l Exposure time:

Acute (short-term) algae toxicity

EC50 (ETHANEDIOL ; CAS No.: 107-21-1) Parameter:

Species: Selenastrum capricornutum Effective dose: 6500 - 13000 mg/l

Exposure time: 96 h

Bacteria toxicity

Parameter: EC20 (ETHANEDIOL; CAS No.: 107-21-1)

Species: Belebtschlamm Effective dose: > 1995 mg/l Exposure time: 0,5 h ISO 8192 Method :

12.2 Persistence and degradability

Biodegradation

Parameter: Biodegradation (ETHANEDIOL; CAS No.: 107-21-1)

Inoculum: Degree of elimination

Degradation rate: 90 % Test durarion: 21 d

Evaluation: Readily biodegradable (according to OECD criteria).

12.3 Bioaccumulative potential

Parameter: Log KOC (ETHANEDIOL; CAS No.: 107-21-1)

Value: -1,36

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12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

SECTION 13: Disposal considerations

Dispose according to legislation.

13.1 Waste treatment methods

Directive 2008/98/EC (Waste Framework Directive)

Before intended use

Waste codes/waste designations according to EWC/AVV

Waste code (EWC/AVV): 07 06 99 (Wastes not otherwise specified)

13.2 Additional information

None

SECTION 14: Transport information

14.1 UN number

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

14.4 Packing group

No dangerous good in sense of these transport regulations.

14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

14.8 Additional information

Land transport (ADR/RID)

No dangerous good in sense of these transport regulations.

Sea transport (IMDG)

No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

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

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mixture

EU legislation

according to Regulation (EC) No. 1907/2006 (REACH)

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no.: 3

National regulations

Water hazard class (WGK)

Classification according to AwSV - Class: 2 (Significant hazardous to water)

Percentage of carcinogenic substances WGK 2: < 0,1 % Percentage of carcinogenic substances WGK 3: < 0,1 % Percentage of carcinogenic substances: < 0,1 % Percentage of substances WGK 3: 0 % Percentage of substances WGK 3 with M-Factor: 0 % Percentage of substances WGK 2: 9,95 % Percentage of substances WGK 2 with M-Factor: 0 % Percentage of substances WGK 1: 24,95 % Percentage of floating liquids: 0 % Percentage of substances non-hazardous to water (nwg): 65,1 % Percentage of substances unidentified: 0 %

15.2 Chemical safety assessment

No information available.

15.3 Additional information

None

SECTION 16: Other information

16.1 Indication of changes

15. Restrictions on use · 15. Water hazard class (WGK)

16.2 Abbreviations and acronyms

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

ADR: European agreement concerning the international carriage of dangerous goods by road

(Accord européen relatif transport des merchandises dangereuses par route)

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany)

BCF: Bio-Concentration Factor

BOD(5): Biochemical oxygen demand (within 5 days)

CAS: Chemical Abstract Service

CLP: Classification, Labelling and Packaging

CMR: Carcinogenic, Mutagenic, toxic for Reproduction

DIN: German Standards Institute / German industrial norm

DNEL: Derived No Effect Level

DOC: Dissolved organic carbon

EAK/ AVV: European waste catalogue/ waste directory-regulation

EC50: Effective Concentration 50%

ECHA: European Chemical Agency

EINECS: European Inventory of Existing Commercial Chemical Substances

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

IATA: International Air Transport Association

IC50: Inhibition Concentration 50%

IMDG: International Maritime Dangerous Goods Code LC50: Lethal Concentration 50% - LD50: Lethal dose 50%

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MAK: Treshold limit values Germany

NLP: No Longer Polymers

NOAEC: No Observed Adverse Effect Concentration

NOAEL: No Observed Adverse Effect Level

OECD: Organization for Economic Cooperation and Development

PBT: persistent, bioaccumulative, toxic

PC: Product category

PNEC: Predicted No Effect Concentration

REACh: Registration, Evaluation and Authorization of Chemicals

RID:Regulations concerning the international carriage of dangerous goods by rail

(Règlement International concernant le transport de marchandises dangereuses par chemin de fer)

STEL: Short-term Exposure Limit STP: Sewage treatment plant

SVHC: Substance of Very High Concern

TLV: Threshold Limit Value TWA: Time Weighted Average

UN: United Nations

VOC: Volatile Organic Compounds

vPvB: very persistent, very bioaccumulative

16.3 Key literature references and sources for data

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

See SECTION 2.1 (classification).

16.5 Relevant H- and EUH-phrases (Number and full text)

Harmful if swallowed. H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

16.6 Training advice

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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