

SAFETY DATA SHEET

Bacillocid Spezial

Version 2.1 Revision Date: 23.10.2018 SDS Number: R11042 Date of last issue: 09.12.2015
Date of first issue: 01.07.2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Bacillocid Spezial

Product code : R11042

Manufacturer or supplier's details

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

Supplier :

Responsible Department : Scientific Affairs
Kundenservice@SIDA-BODE-CHEMIE.de

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

Recommended use of the chemical and restrictions on use

Recommended use : In-door use
Disinfectants and general biocidal products
For further information, refer to the product technical data sheet.

Restrictions on use : Restricted to professional users.

2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin corrosion/irritation : Sub-category 1A

Respiratory sensitisation (Inhalation) : Category 1

Skin sensitisation (Dermal) : Category 1

Germ cell mutagenicity : Category 2

Carcinogenicity : Category 1B


Specific target organ toxicity - single exposure : Category 3

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 2

GHS label elements

Bacillocid Spezial

- Hazard pictograms : 
- Signal word : Danger
- Hazard statements : H302 + H332 Harmful if swallowed or if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H411 Toxic to aquatic life with long lasting effects.
- Precautionary statements : P201 Obtain special instructions before use.

Prevention:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284 Wear respiratory protection.

Response:

- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Disposal:

- P501 Dispose of contents/ container to an approved waste disposal plant. Dispose of contents/ container to an approved waste disposal plant.

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)
(ethylenedioxy)dimethanol	3586-55-8	>= 10 - < 20
Tridecanol, branched, ethoxylated	69011-36-5	>= 10 - < 20
Glutaral	111-30-8	>= 1 - < 10
Benzyl-C12-18-alkyldimethylammonium chlorides	68391-01-5	>= 1 - < 10
Dodecylguanidine monohydrochloride	13590-97-1	>= 1 - < 10
Formaldehyde	50-00-0	>= 1 - < 10
Alcohols, C16-18, ethoxylated	68439-49-6	>= 1 - < 10
Poly(oxy-1,2-ethanediyl), .alpha.-(2-ethylhexyl)-	111798-26-6	>= 1 - < 10

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.omega.-hydroxy-, phosphate, sodium salt		
Propan-2-ol	67-63-0	$\geq 1 - < 10$
(R)-p-mentha-1,8-diene	5989-27-5	$\geq 0,1 - < 1$

4. FIRST AID MEASURES

- General advice : Call a physician immediately.
- If inhaled : If breathed in, move person into fresh air.
- In case of skin contact : Take off all contaminated clothing immediately.
Wash off with plenty of water.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- If swallowed : Rinse mouth.
Do NOT induce vomiting.
- Most important symptoms and effects, both acute and delayed : None known.
- Notes to physician : Keep under medical supervision for at least 48 hours.
For specialist advice physicians should contact the Poisons Information Service.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray jet
Carbon dioxide (CO₂)
Foam
Dry powder
- Unsuitable extinguishing media : none
- Hazardous combustion products : No hazardous combustion products are known
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
Wear respiratory protection.
- Environmental precautions : Should not be released into the environment.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
- Conditions for safe storage : Store at room temperature in the original container.
- Materials to avoid : Keep away from food and drink.

Bacillocid Spezial**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Formaldehyde	50-00-0	C	0,3 ppm	ACGIH

Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
formaldehyde	50-00-0	C	0,3 ppm	ACGIH

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protectionIn case of full contact: Nitrile rubber

Material : Protective gloves complying with EN 374.
 Break through time : > 480 min
 Glove thickness : 0,1 mm
 Protective index : Class 6
 : Peha-soft nitrile guard

In case of contact through splashing: Nitrile rubber

Material : Protective gloves complying with EN 374.
 Break through time : 8 min
 Glove thickness : 0,1 mm
 Protective index : Class 6
 : Peha-soft nitrile fino

Remarks : In case of full contact: Nitrile rubber
 In case of contact through splashing: Nitrile rubber

Eye protection : Tightly fitting safety goggles

Skin and body protection : Lightweight protective clothing

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
 Avoid contact with the skin and the eyes.
 Keep away from food and drink.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
 Colour : light yellow
 Odour : stinging
 pH : 4 - 5 (20 °C)
 Melting point/range : not determined
 Boiling point/boiling range : not determined
 Flash point : 63 °C

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	Method: DIN 51755 Part 1
Flammability (solid, gas)	: not auto-flammable
Self-ignition	: not auto-flammable
Vapour pressure	: No data available
Density	: 1,05 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	: Protect from frost, heat and sunlight.
Hazardous decomposition products	: This product may release the following: Formaldehyde (CAS: 50-00-0)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute dermal toxicity	: Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method
	Acute toxicity estimate: > 2.000 mg/kg Method: Calculation method

Components:

(ethylenedioxy)dimethanol (CAS: 3586-55-8):

Acute oral toxicity	: LD50 (Rat, female): 760 mg/kg
Acute dermal toxicity	: LD50 (Rat): > 2.000 mg/kg

Tridecanol, branched, ethoxylated (CAS: 69011-36-5):

Acute oral toxicity	: LD50 Oral (Rat): > 5.000 mg/kg Method: Expert judgement
Acute dermal toxicity	: LD50 Dermal (Rabbit): > 2.000 mg/kg Method: Expert judgement

Glutaral (CAS: 111-30-8):

Acute inhalation toxicity	: LC50 (Rat, female): 0,28 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: Corrosive to the respiratory tract.
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Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5):

Acute oral toxicity	: LD50 (Rat): 344 mg/kg
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Acute dermal toxicity : LD50 (Rabbit): 3.340 mg/kg

Dodecylguanidine monohydrochloride (CAS: 13590-97-1):

Acute oral toxicity : LD50 (Rat): > 600 mg/kg

Alcohols, C16-18, ethoxylated (CAS: 68439-49-6):

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

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg

Poly(oxy-1,2-ethanediyl), .alpha.-(2-ethylhexyl)-.omega.-hydroxy-, phosphate, sodium salt (CAS: 111798-26-6):

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

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

Skin corrosion/irritation**Components:**

(ethylenedioxy)dimethanol (CAS: 3586-55-8):

Result: Skin irritation

Tridecanol, branched, ethoxylated (CAS: 69011-36-5):

Species: Rabbit

Result: No skin irritation

Glutaral (CAS: 111-30-8):

Species: Rabbit

Method: OECD Test Guideline 404

Result: Corrosive

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5):

Species: Rabbit

Result: Corrosive after 3 minutes to 1 hour of exposure

Dodecylguanidine monohydrochloride (CAS: 13590-97-1):

Result: Corrosive after 3 minutes to 1 hour of exposure

Formaldehyde (CAS: 50-00-0):

Result: Causes burns.

Alcohols, C16-18, ethoxylated (CAS: 68439-49-6):

Result: No skin irritation

Poly(oxy-1,2-ethanediyl), .alpha.-(2-ethylhexyl)-.omega.-hydroxy-, phosphate, sodium salt (CAS: 111798-26-6):

Assessment: Irritating to skin.

Result: Skin irritation

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

Species: Rabbit

Result: No skin irritation

(R)-p-mentha-1,8-diene (CAS: 5989-27-5):

Result: Irritating to skin.

Bacillocid Spezial**Serious eye damage/eye irritation****Components:****(ethylenedioxy)dimethanol** (CAS: 3586-55-8):

Result: Risk of serious damage to eyes.

Tridecanol, branched, ethoxylated (CAS: 69011-36-5):

Species: Rabbit

Method: OECD Test Guideline 437

Result: Risk of serious damage to eyes.

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5):

Species: Rabbit

Result: Corrosive

Dodecylguanidine monohydrochloride (CAS: 13590-97-1):

Result: Irreversible effects on the eye

Alcohols, C16-18, ethoxylated (CAS: 68439-49-6):

Result: No eye irritation

Poly(oxy-1,2-ethanediyl), .alpha.-(2-ethylhexyl)-.omega.-hydroxy-, phosphate, sodium salt (CAS: 111798-26-6):

Assessment: Irritating to eyes.

Result: Eye irritation

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

Species: Rabbit

Result: Eye irritation

Respiratory or skin sensitisation**Components:****(ethylenedioxy)dimethanol** (CAS: 3586-55-8):

Result: May cause sensitisation by skin contact.

Tridecanol, branched, ethoxylated (CAS: 69011-36-5):

Test Type: Maximisation Test

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Glutaral (CAS: 111-30-8):

Species: Guinea pig

Result: The product is a skin sensitiser, sub-category 1A.

Result: May cause sensitisation by inhalation.

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5):

Test Type: Maximisation Test

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Did not cause sensitisation on laboratory animals.

Formaldehyde (CAS: 50-00-0):

Result: May cause sensitisation by skin contact.

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

Test Type: Buehler Test

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

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(R)-p-mentha-1,8-diene (CAS: 5989-27-5):

Assessment: May cause sensitisation by skin contact.

Germ cell mutagenicity

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

Components:

Formaldehyde (CAS: 50-00-0):

Carcinogenicity - Assessment : May cause cancer by inhalation.

Reproductive toxicity

No data available

STOT - single exposure

Components:

Glutaral (CAS: 111-30-8):

Assessment: May cause respiratory irritation.

STOT - repeated exposure

No data available

Repeated dose toxicity

No data available

Aspiration toxicity

No data available

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 7,7 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Components:

(ethylenedioxy)dimethanol (CAS: 3586-55-8):

Toxicity to fish : LC50 (Fish): 71 mg/l

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- Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 28 mg/l
Exposure time: 48 h
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 4,62 mg/l
Exposure time: 72 h

Tridecanol, branched, ethoxylated (CAS: 69011-36-5):

- Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 1 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 1 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- Toxicity to microorganisms : IC50 (Pseudomonas putida): > 1.000 mg/l
Exposure time: 16 h
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 1 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

Glutaral (CAS: 111-30-8):

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,8 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2,1 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
- Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 0,6 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
- NOEC (Desmodesmus subspicatus (green algae)): 0,025 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to fish (Chronic toxicity) : NOEC: 1,6 mg/l
Exposure time: 97 d
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 5 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

- M-Factor (Chronic aquatic toxicity) : 1

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5):

- Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0,28 mg/l

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	Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0,016 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata (microalgae)): 0,049 mg/l Exposure time: 72 h Test Type: Cell multiplication inhibition test Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	: 10
Toxicity to fish (Chronic toxicity)	: NOEC: 0,032 mg/l Exposure time: 34 d Species: Leuciscus idus (Golden orfe) Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 0,0042 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	: 1

Alcohols, C16-18, ethoxylated (CAS: 68439-49-6):

Toxicity to fish	: LC50 (Leuciscus idus (Golden orfe)): > 1 mg/l Exposure time: 96 h Method: ISO 7346/2
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 1 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	: IC50 (Desmodesmus subspicatus (green algae)): > 1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

Poly(oxy-1,2-ethanediyl), .alpha.-(2-ethylhexyl)-.omega.-hydroxy-, phosphate, sodium salt (CAS: 111798-26-6):

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 75 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 267 mg/l Exposure time: 48 h
Propan-2-ol (CAS: 67-63-0):	
Toxicity to fish	: LC50 (Leuciscus idus (Golden orfe)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h
Toxicity to algae	: EC50 (Scenedesmus capricornutum (fresh water algae)): > 100 mg/l Exposure time: 72 h

Persistence and degradability**Product:**

Biodegradability	: Remarks: The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion
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are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Components:

Glutaral (CAS: 111-30-8):

Biodegradability	:	Remarks: Readily biodegradable, according to appropriate OECD test.
Biochemical Oxygen Demand (BOD)	:	Biochemical oxygen demand 235 mg/g Incubation time: 5 d
Chemical Oxygen Demand (COD)	:	1.385 mg/g

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5):

Biodegradability	:	Remarks: According to the results of tests of biodegradability this product is considered as being readily biodegradable.
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Bioaccumulative potential

No data available

Mobility in soil

No data available

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. The product should not be allowed to enter drains, water courses or the soil. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Contaminated packaging	:	Empty remaining contents. Offer rinsed packaging material to local recycling facilities. Store containers and offer for recycling of material when in accordance with the local regulations.

14. TRANSPORT INFORMATION

ADR

UN number	:	UN 3265
Proper shipping name	:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides, glutaral)
Class	:	8
Packing group	:	III
Labels	:	8
Hazard Identification Number	:	80
Tunnel restriction code	:	(E)
Environmentally hazardous	:	yes

UNRTDG

UN number	:	UN 3265
Proper shipping name	:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

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(quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides, glutaral)

Class : 8
Packing group : III
Labels : 8

IATA-DGR

UN/ID No. : UN 3265
Proper shipping name : Corrosive liquid, acidic, organic, n.o.s.
(quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides, glutaral)

Class : 8
Packing group : III
Labels : Class 8 - Corrosive
Packing instruction (cargo aircraft) : 856
Packing instruction (passenger aircraft) : 852

IMDG-Code

UN number : UN 3265
Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides, glutaral)

Class : 8
Packing group : III
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : yes

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

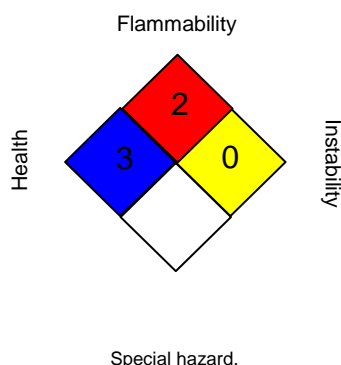
Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers.

International Regulations

16. OTHER INFORMATION

Safety datasheet sections which have been updated:

2. Hazards identification

Bacillocid Spezial**Further information****NFPA:****HMIS® IV:**

HEALTH	*	3
FLAMMABILITY		2
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 / C : Ceiling limit

AICS - Australian Inventory of Chemical Substances; 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; CPR - Controlled Products Regulations; 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; 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 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.

TC / EN