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

1.1 Product identifier

Trade name : Sterillium classic pure

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

Use of the Substance/Mixture : In-door use

Disinfectants and general biocidal products, For further information,

refer to the product technical data sheet.

Recommended restrictions on

use

: Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Manufacturer, importer, supplier : BODE Chemie GmbH

Melanchthonstraße 27 22525 Hamburg

Tel.: +49 (0)40 / 54 00 60

Responsible Department : Scientific Affairs

KundenService-SiDa@bode-chemie.de

1.4 Emergency telephone number

Emergency telephone number : Giftnotruf Göttingen

24h-Phone +49 (0)551 / 1 92 40

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (67/548/EEC, 1999/45/EC)

Flammable R10: Flammable. Irritant R36: Irritating to eyes.

R67: Vapours may cause drowsiness and dizziness.

2.2 Label elements

Labelling according to EC Directives: 1999/45/EC

Hazard symbols :



Irritant

R-phrase(s) : R10 Flammable. R36 Irritating to eyes.

R67 Vapours may cause drowsiness and dizziness.

S-phrase(s) : S26 In case of contact with eyes, rinse immediately

with plenty of water and seek medical advice.

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S46 If swallowed, seek medical advice immediately

and show this container or label.

2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration num- ber	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
propan-2-ol	67-63-0 200-661-7 01-2119457558- 25	F; R11 Xi; R36 R67	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	>= 25 - < 50
propan-1-ol	71-23-8 200-746-9 01-2119486761- 29	F; R11 Xi; R41 R67	Flam. Liq. 2; H225 Eye Dam. 1; H318 STOT SE 3; H336	>= 25 - < 50
tetradecanol	112-72-1 204-000-3 01-2119485910- 33	Xi; R36	Eye Irrit. 2; H319 Aquatic Chronic 1; H410	>= 1 - < 3
Mecetronium ethyl sulfate	3006-10-8 221-106-5	Xn; R22 C; R34 N; R50	Skin Corr. 1C; H314 Acute Tox. 4; H302 Aquatic Acute 1; H400	>= 0,025 - < 0,25

For the full text of the R-phrases mentioned in this Section, see Section 16. For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : If you feel unwell, seek medical advice (show the label where possi-

ble).

If inhaled : If breathed in, move person into fresh air.

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In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at

least 10 minutes.

If swallowed : Rinse mouth.

Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : For specialist advice physicians should contact the Poisons Infor-

mation Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide.

Unsuitable extinguishing media : none

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

: Cool closed containers exposed to fire with water spray.

Hazardous combustion products : no data available

5.3 Advice for firefighters

Further information : Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.

Remove all sources of ignition.

6.2 Environmental precautions

Environmental precautions : Should not be released into the environment.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).

6.4 Reference to other sections

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Keep away from heat.

Advice on protection against fire

and explosion

: Keep away from sources of ignition - No smoking.

Hygiene measures : Handle in accordance with good industrial hygiene and safety prac-

tice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas

and containers

: Store at room temperature in the original container. Keep tightly

closed.

Advice on common storage : Keep away from food and drink.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL

propan-2-ol (CAS: 67-63-0) : End Use: Workers

Exposure routes: Skin contact

Potential health effects: Chronic effects

Value: 888 mg/kg

End Use: Workers

Exposure routes: Inhalation

Potential health effects: Chronic effects

Value: 500 mg/m3

End Use: Consumers

Exposure routes: Skin contact

Potential health effects: Chronic effects

Value: 319 mg/kg

End Use: Consumers Exposure routes: Inhalation

Potential health effects: Chronic effects

Value: 89 mg/m3

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End Use: Consumers Exposure routes: Ingestion

Potential health effects: Chronic effects

Value: 26 mg/kg

propan-1-ol (CAS: 71-23-8) : End Use: Workers

Exposure routes: Skin contact

Potential health effects: Long-term systemic effects

Value: 136 mg/kg

End Use: Workers

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 268 mg/m3

End Use: Workers

Exposure routes: Inhalation

Potential health effects: Short-term exposure

Value: 1723 mg/m3

End Use: Consumers

Exposure routes: Skin contact

Potential health effects: Long-term systemic effects

Value: 81 mg/kg

End Use: Consumers
Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 80 mg/m3

End Use: Consumers Exposure routes: Inhalation

Potential health effects: Short-term exposure

Value: 1036 mg/m3

End Use: Consumers Exposure routes: Ingestion

Potential health effects: Long-term systemic effects

Value: 61 mg/kg

tetradecanol (CAS: 112-72-1) : End Use: Workers

Exposure routes: Skin contact

Potential health effects: Long-term systemic effects

Value: 125 mg/kg

End Use: Workers

Exposure routes: Inhalation

Potential health effects: Long-term systemic effects

Value: 220 mg/m3

End Use: Consumers

Exposure routes: Skin contact Potential health effects: Acute effects

Value: 75 mg/kg

End Use: Consumers
Exposure routes: Inhalation

Potential health effects: Acute effects

Value: 65 mg/m3

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End Use: Consumers Exposure routes: Ingestion

Potential health effects: Acute effects

Value: 75 mg/kg

PNEC

propan-2-ol (CAS: 67-63-0) : Fresh water

Value: 140,9 mg/l

Marine water Value: 140,9 mg/l

Fresh water sediment Value: 552 mg/kg

Marine sediment Value: 552 mg/kg

Soil

Value: 28 mg/kg

propan-1-ol (CAS: 71-23-8) : Fresh water

Value: 10 mg/l

Soil

Value: 2,2 mg/kg

Marine water Value: 1 mg/l

Fresh water sediment Value: 22,8 mg/kg

Marine sediment Value: 2,28 mg/kg

tetradecanol (CAS: 112-72-1) : Fresh water

Value: 0,00032 mg/l

Marine water

Value: 0,000032 mg/l

Soil

Value: 0,28 mg/kg

Fresh water sediment Value: 0,36 mg/kg

Marine sediment Value: 0,036 mg/kg

8.2 Exposure controls

Personal protective equipment

<u>Protective measures</u>: No special protective equipment required.

Environmental exposure controls

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General advice : Should not be released into the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless
Odour : alcohol-like

Odour Threshold : no data available pH : no data available Melting point/range : not determined

Boiling point/boiling range : $83 \, ^{\circ}\text{C}$ Flash point : $23 \, ^{\circ}\text{C}$

Method: DIN 51755 Part 1

Evaporation rate : no data available Flammability (solid, gas) : no data available

Burning rate : no data available

Lower explosion limit : lower flammability limit

70 mg/m3 at 20 °C

Method: DIN 51649

Upper explosion limit : no data available

Vapour pressure : 6 kPa at 50 °C

Relative vapor density : no data available
Relative density : no data available
Density : 0,85 g/cm3 at 20 °C

Water solubility : completely miscible

Solubility in other solvents : no data available

Partition coefficient: n- : no data available

octanol/water

Ignition temperature : no data available

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Thermal decomposition : no data available
Viscosity, dynamic : no data available
Viscosity, kinematic : no data available
Explosive properties : no data available
Oxidizing properties : no data available

9.2 Other information

Conductivity : no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : None reasonably foreseeable.

10.4 Conditions to avoid

Conditions to avoid : Heat

Strong sunlight for prolonged periods.

10.5 Incompatible materials

Materials to avoid : None.

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product

Acute oral toxicity : LD50 Oral rat: 13.300 mg/kg

Acute inhalation toxicity : no data available

Acute toxicity estimate : > 20 mg/l Test atmosphere: vapour Method: Calculation method

Acute dermal toxicity : LD50 Dermal rabbit: > 8.500 mg/kg

no data available

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Acute toxicity (other routes of

administration)

: no data available

Skin corrosion/irritation : Result: No skin irritation

Serious eye damage/eye irrita-

tion

: Result: Eye irritation

Respiratory or skin sensitization : Result: Does not cause skin sensitization.

Germ cell mutagenicity

Genotoxicity in vitro : no data available
Genotoxicity in vivo : no data available

Carcinogenicity : This information is not available.

Reproductive toxicity : This information is not available.

Teratogenicity : This information is not available.

STOT - single exposure : Remarks: no data available

Repeated dose toxicity

Note: This information is not available.

STOT - repeated exposure : Remarks: no data available

Components:

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

Acute oral toxicity : LD50 Oral rat: > 2.000 mg/kg

Acute inhalation toxicity : LC50 rat: > 20 mg/l

Exposure time: 8 h

Acute dermal toxicity : LD50 Dermal rabbit: > 2.000 mg/kg

Skin corrosion/irritation : Species: rabbit

Result: No skin irritation

Serious eye damage/eye irrita-

tion

Species: rabbit Result: Eye irritation

Respiratory or skin sensitization : Test Method: Buehler Test

Species: guinea pig

Result: Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Genotoxicity in vitro : Type: Ames test

with or without metabolic activation

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Result: negative

propan-1-ol (CAS: 71-23-8):

Acute oral toxicity : LD50 Oral rat: 8.000 mg/kg

Acute inhalation toxicity : LC50 rat: > 33,8 mg/l

Exposure time: 4 h

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 Dermal rabbit: 4.032 mg/kg

Method: Calculation method

Skin corrosion/irritation : Species: rabbit

Result: No skin irritation

Serious eye damage/eye irrita-

tion

Species: rabbit

Result: Irreversible effects on the eye

Respiratory or skin sensitization : Test Method: Maximisation Test

Species: guinea pig

Result: Did not cause sensitization on laboratory animals.

Method: OECD Test Guideline 406

Germ cell mutagenicity

Genotoxicity in vitro : Type: in vitro assay

Result: negative

tetradecanol (CAS: 112-72-1):

Acute oral toxicity : LD50 rat: > 5.000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 rat: 0,375 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 rabbit: > 5.000 mg/kg

Skin corrosion/irritation : Result: No skin irritation

Method: OECD Test Guideline 404

Serious eye damage/eye irrita-

tion

: Result: Eye irritation

Method: OECD Test Guideline 405

Respiratory or skin sensitization : Result: Did not cause sensitization on laboratory animals.

Method: OECD Test Guideline 406

Mecetronium ethyl sulfate (CAS: 3006-10-8):

Acute oral toxicity : LD50 Oral rat: > 600 mg/kg

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Method: OECD Test Guideline 401

Acute dermal toxicity : no data available

Skin corrosion/irritation : Result: Corrosive

Serious eye damage/eye irrita-

tion

: Result: Risk of serious damage to eyes.

Respiratory or skin sensitization : Result: Does not cause skin sensitization.

Method: OECD Test Guideline 406

Germ cell mutagenicity

Germ cell mutagenicity- As-

sessment

: Not mutagenic in Ames Test.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 2.300 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: no data available

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 22 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to bacteria : EC50 (Bacteria): > 10.000 mg/l

Method: DIN 38 412 Part 8

Toxicity to daphnia and other aquatic invertebrates (Chronic

toxicity)

: no data available

Components:

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

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 100 mg/l

Exposure time: 48 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

propan-1-ol (CAS 71-23-8):

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 4.555 mg/l

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Exposure time: 96 h

Test Method: flow-through test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 3.644 mg/l

Exposure time: 48 h Method: DIN 38412

Toxicity to algae : NOEC (Chlorella vulgaris (Fresh water algae)): 1.150 mg/l

Exposure time: 48 h

Toxicity to bacteria : EC50 (Bacteria): > 1.000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

tetradecanol (CAS 112-72-1):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 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 : EC50 (Desmodesmus subspicatus (green algae)): > 1 mg/l

Exposure time: 72 h
Test Method: static test

Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic

toxicity)

NOEC: 0,0016 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

Mecetronium ethyl sulfate (CAS 3006-10-8):

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 0.06 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

EC50 (Daphnia): 0,019 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 0,054 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Desmodesmus subspicatus (green algae)): 0,00014 mg/l

M-Factor : 10

12.2 Persistence and degradability

Product:

Biodegradability : Result: Readily biodegradable.

no data available

Components:

Mecetronium ethyl sulfate (CAS 3006-10-8):

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301

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12.3 Bioaccumulative potential

Product:

Bioaccumulation : no data available

12.4 Mobility in soil

Product:

Distribution among environmen- : no data available

tal compartments

12.5 Results of PBT and vPvB assessment

Product:

Assessment : no data available

12.6 Other adverse effects

Product:

Adsorbed organic bound halo-

gens (AOX)

: Product does not contain any organic halogens.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of as hazardous waste in compliance with local and national

regulations.

The following Waste Codes are only suggestions:

Waste Code EU : 070601* aqueous washing liquids and mother liquors

Contaminated packaging : Empty remaining contents.

Store containers and offer for recycling of material when in accord-

ance with the local regulations.

SECTION 14: Transport information

14.1 UN number

 ADR
 : UN 1987

 IMDG
 : UN 1987

 IATA
 : UN 1987

14.2 UN proper shipping name

ADR : ALCOHOLS, N.O.S. (isopropanol, n-propanol)

IMDG : ALCOHOLS, N.O.S. (isopropanol, n-propanol)

IATA : ALCOHOLS, N.O.S. (isopropanol, n-propanol)

14.3 Transport hazard class

ADR : 3 IMDG : 3 IATA : 3

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14.4 Packaging group

ADR

Packaging group : III
Classification Code : F1
Hazard identification No : 30
Labels : 3
Tunnel restriction code : D/E

IMDG

Packaging group : III Labels : 3

EmS Number : F-E. S-D

IATA

Packaging group : III Labels : 3

14.5 Environmental hazards

ADR

Environmentally hazardous : no IMDG

Marine Pollutant : no IATA

Environmentally hazardous : no

14.6 Special precautions for user

not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

Notification status

CH INV : The formulation contains substances listed on the Swiss Inventory

US.TSCA : On TSCA Inventory

DSL : This product contains the following components listed on the Cana-

dian NDSL. All other components are on the Canadian DSL.

AICS : On the inventory, or in compliance with the inventory

NZIOC : Not in compliance with the inventory ENCS : Not in compliance with the inventory ISHL : Not in compliance with the inventory KECI : Not in compliance with the inventory PICCS : Not in compliance with the inventory IECSC : Not in compliance with the inventory

For explanation of abbreviations see section 16.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

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SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

R10	Flammable.
R11	Highly flammable.
R22	Harmful if swallowed.
R34	Causes burns.
R36	Irritating to eyes.
R41	Risk of serious damage

R41 Risk of serious damage to eyes. R50 Very toxic to aquatic organisms.

R67 Vapours may cause drowsiness and dizziness.

Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Notification status

CH INV : Switzerland. New notified substances and declared preparations

US.TSCA : Toxic substances control act

DSL : Canada. DSL - Domestic Substances List, part of CEPA
AICS : Australia. AICS - Australian Inventory of Chemical Substances

NZIoC : New Zealand Inventory of Chemical Substances

ENCS : Japan. ENCS - Existing and New Chemical Substances Inventory

ISHL : Japan. Industrial Safety and Health Law - Inventory KECI : Korea. KECI - Korean Existing Chemicals Inventory

PICCS : Philippines. PICCS - Philippines Inventory of Chemicals and Chemi-

cal Substances

IECSC : China. IECSC - Inventory of Existing Chemical Substances in China

Safety datasheet sections which have been updated:

- 8. Exposure controls/personal protection
- 9. Physical and chemical properties
- 11. Toxicological information
- 12. Ecological information
- 15. Regulatory information

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.

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