

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Sterillium Virugard

Version 1.3 Revision Date: 12.06.2019 SDS Number: R11913 Date of last issue: 04.02.2019
Date of first issue: 05.07.2018

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

1.1 Product identifier

Trade name : Sterillium Virugard

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

Use of the Substance/Mixture : In-door use
Hand Sanitizer, Human hygiene biocidal products, For further information, refer to the product technical data sheet.

Recommended restrictions on use : For professional users only.

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

H & R Healthcare Limited
Melton Court
Gibson Lane
Hull
HU14 3HH
United Kingdom

Responsible Department : birgitt.rimell@hrhealthcare.co.uk

1.4 Emergency telephone number

Emergency telephone number : National Poisons Information Service (L)
Medical Toxicology Unit
Guy's & St. Thomas' Hospital Trust
24h-Phone 0 04 41 71 /635-91 91

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2 H225: Highly flammable liquid and vapour.

Long-term (chronic) aquatic hazard, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : P102 Keep out of reach of children.

Prevention:

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P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P273 Avoid release to the environment.

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 advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Disposal:

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

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Alcoholic solution

Components

Chemical name	CAS-No. EC-No. Index-No. REACH No.	Classification	Concentration (% w/w)
Substances with a workplace exposure limit :			
Ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 90 - <= 100

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
If accidentally swallowed obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Tiredness
Eye irritation
Light-headedness
giddiness

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4.3 Indication of any immediate medical attention and special treatment needed

Treatment : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray jet
Alcohol-resistant foam
Dry powder
Carbon dioxide (CO₂)

Unsuitable extinguishing media : High volume water jet

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 hazardous combustion products are known

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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 material for containment and cleaning up

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

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Keep away from fire, sparks and heated surfaces.

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Take measures to prevent the build up of elec-

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trostatic charge.

Hygiene measures : Keep away from food and drink. Avoid contact with eyes.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store at room temperature in the original container.

Further information on storage conditions : Storage must be in accordance with the GefStoffV (Germany).

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

Recommended storage temperature : 5 - 25 °C

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Ethanol	64-17-5	TWA	1,000 ppm 1,920 mg/m ³	GB EH40
Further information	2: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.			
pentane	109-66-0	TWA	1,000 ppm 3,000 mg/m ³	2006/15/EC
Further information	Indicative.			
		TWA	600 ppm 1,800 mg/m ³	GB EH40
Further information	2: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Ethanol (CAS: 64-17-5)	Workers	Inhalation	Long-term systemic effects	950 mg/m ³
	Workers	Skin contact	Long-term systemic effects	343 mg/kg
	Consumers	Inhalation	Long-term systemic effects	114 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	206 mg/kg
	Consumers	Ingestion	Local effects	87 mg/kg
	tetradecanol (CAS: 112-72-1)	Workers	Skin contact	Long-term systemic effects
Workers		Inhalation	Long-term systemic effects	220 mg/m ³
Consumers		Skin contact	Acute effects	75 mg/kg
Consumers		Inhalation	Acute effects	65 mg/m ³
Consumers		Ingestion	Acute effects	75 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
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Ethanol	Fresh water	0.96 mg/l
	Fresh water sediment	3.6 mg/kg
	Soil	0.63 mg/kg
tetradecanol	Fresh water	0.00032 mg/l
	Soil	0.28 mg/kg
	Fresh water sediment	0.36 mg/kg

8.2 Exposure controls

Personal protective equipment

Protective measures : No special protective equipment required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	colourless
Odour	:	alcohol-like
pH	:	Not applicable
Melting point/range	:	not determined
Boiling point/boiling range	:	76 °C
Flash point	:	0 °C Method: DIN 51755 Part 1
Flammability (solid, gas)	:	No data available
Lower explosion limit / Lower flammability limit	:	58 g/m ³ Method: DIN 51649
Vapour pressure	:	18 kPa (50 °C)
Density	:	0.79 g/cm ³ (20 °C)
Solubility(ies) Water solubility	:	partly miscible

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.

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Exothermic reaction with strong acids.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : LD50 Oral (Rat): > 12,000 mg/kg
Method: Calculation method

Acute dermal toxicity : LD50 Dermal (Rat): > 2,000 mg/kg
Method: Calculation method

Components:

Ethanol (CAS: 64-17-5):

Acute oral toxicity : LD50 Oral (Rat): 10,470 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 51 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403

Skin corrosion/irritation

Components:

Ethanol (CAS: 64-17-5):

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

Serious eye damage/eye irritation

Components:

Ethanol (CAS: 64-17-5):

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

Respiratory or skin sensitisation

Components

Ethanol (CAS: 64-17-5):

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

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Germ cell mutagenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

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

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Components:

Ethanol (CAS: 64-17-5):

Toxicity to fish : LC50 (Fish): 13,000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 12,340 mg/l
Exposure time: 48 h

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

12.2 Persistence and degradability

Product:

Biodegradability : Result: Readily biodegradable.
Remarks: The data is estimated based on the component aquatic toxicity classification.

Components:

Ethanol (CAS: 64-17-5):

Biodegradability : Remarks: Readily biodegradable, according to appropriate OECD test.

12.3 Bioaccumulative potential

No data available

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12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : 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.

SECTION 14: Transport information

14.1 UN number

ADN : UN 1170
ADR : UN 1170
RID : UN 1170
IMDG : UN 1170
IATA : UN 1170

14.2 UN proper shipping name

ADN : ETHANOL SOLUTION
ADR : ETHANOL SOLUTION
RID : ETHANOL SOLUTION
IMDG : ETHANOL SOLUTION
IATA : Ethanol solution

14.3 Transport hazard class(es)

ADN : 3
ADR : 3
RID : 3
IMDG : 3
IATA : 3

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14.4 Packing group

ADN

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

ADR

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3
Tunnel restriction code : (D/E)

RID

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

IMDG

Packing group : II
Labels : 3
EmS Code : F-E, S-D

IATA (Cargo)

Packing instruction (cargo aircraft) : 364
Packing instruction (LQ) : Y341
Packing group : II
Labels : Class 3 - Flammable Liquid

IATA (Passenger)

Packing instruction (passenger aircraft) : 353
Packing instruction (LQ) : Y341
Packing group : II
Labels : Class 3 - Flammable Liquid

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 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.

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

Not applicable for product as supplied.

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SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern : Not applicable
for Authorisation (Article 59).

REACH - List of substances subject to authorisation (Annex : Not applicable
XIV)

Regulation (EC) No 649/2012 of the European Parliament and : Not applicable
the Council concerning the export and import of dangerous
chemicals

REACH - Restrictions on the manufacture, placing on the mar- : Not applicable
ket and use of certain dangerous substances, preparations and
articles (Annex XVII)

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-
accident hazards involving dangerous substances.

P5c FLAMMABLE LIQUIDS

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions
(integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 98.5 %
VOC content excluding water

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations,
where applicable.

15.2 Chemical safety assessment

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

SECTION 16: Other information

Full text of H-StatementsH225 : Highly flammable liquid and vapour.
H319 : Causes serious eye irritation.

Full text of other abbreviations

Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
2006/15/EC : Europe. Indicative occupational exposure limit values
GB EH40 : UK. EH40 WEL - Workplace Exposure Limits
2006/15/EC / TWA : Limit Value - eight hours
GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; 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 Invento-

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ry; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:

Flam. Liq. 2 H225
Aquatic Chronic 3 H412

Classification procedure:

Based on product data or assessment
Based on product data or assessment

Safety datasheet sections which have been updated:

8. Exposure controls/personal protection

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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