

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name : Bacillol plus

**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 (REGULATION (EC) No 1272/2008)**

|   |  |
|---|--|
| Flammable liquids , Category 3  | H226: Flammable liquid and vapour.       |
| Serious eye damage , Category 1   | H318: Causes serious eye damage.         |
| Specific target organ toxicity - single exposure , Category 3, Central nervous system | H336: May cause drowsiness or dizziness. |

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

|           |  |
|-----------|--|
| Flammable | R10: Flammable.                                  |
| Irritant  | R41: Risk of serious damage to eyes.             |
|           | R67: Vapours may cause drowsiness and dizziness. |

**2.2 Label elements****Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal word : Danger

|                   |   |                      |  |
|-------------------|---|----------------------|--|
| Hazard statements | : | H226<br>H318<br>H336 | Flammable liquid and vapour.<br>Causes serious eye damage.<br>May cause drowsiness or dizziness. |
|-------------------|---|----------------------|--|

Precautionary statements : P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

**Prevention:**  
P261 Avoid breathing vapours.  
P280 Wear eye protection/ face protection.

**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.  
P310 Immediately call a POISON CENTER or doctor/physician.

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

Hazardous components which must be listed on the label:

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

**Additional Labelling:**

EUH208 May produce an allergic reaction.

Contains: Glutaral (CAS: 111-30-8)

**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**

**Hazardous components**

| Chemical Name | CAS-No.<br>EC-No.<br>Registration number | Classification<br>(67/548/EEC)          | Classification<br>(REGULATION (EC)<br>No 1272/2008)   | Concentration<br>[%] |
|---------------|--|---|---|----------------------|
| Propan-1-ol   | 71-23-8<br>200-746-9<br>01-2119486761-29 | F; R11<br>Xi; R41<br>R67                | Flam. Liq.2; H225<br>Eye Dam.1; H318<br>STOT SE3; H336  | >= 30 - < 50         |
| Propan-2-ol   | 67-63-0<br>200-661-7<br>01-2119457558-25 | F; R11<br>Xi; R36<br>R67                | Flam. Liq.2; H225<br>Eye Irrit.2; H319<br>STOT SE3; H336  | >= 20 - < 30         |
| Glutaral      | 111-30-8<br>203-856-5                    | T; R23/25<br>C; R34<br>R42/43<br>N; R50 | Acute Tox.3; H301<br>Acute Tox.3; H331<br>Skin Corr.1B; H314<br>Resp. Sens.1; H334<br>Skin Sens.1; H317<br>STOT SE3; H335<br>Aquatic Acute1;<br>H400<br>Aquatic Chronic3;<br>H412 | >= 0,1 - < 0,25      |

For explanation of abbreviations see section 16.

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**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 possible).
- If inhaled : Move to fresh air.
- In case of skin contact : Wash off with soap and water.
- 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 Information Service.

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**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 hazardous combustion products are known

**5.3 Advice for firefighters**

- Special protective equipment for firefighters : Use personal protective equipment.

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**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

For personal protection see section 8.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.

Advice on protection against fire and explosion : Take measures to prevent the build up of electrostatic charge. Keep away from open flames, hot surfaces and sources of ignition. Provide sufficient air exchange and/or exhaust in work rooms. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors.

Hygiene measures : Wash hands before breaks and at the end of workday. Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice. Do not get in eyes.

#### 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

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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

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

Propan-1-ol : 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/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Short-term exposure  
Value: 1723 mg/m<sup>3</sup>  
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

Propan-2-ol :

- Value: 80 mg/m<sup>3</sup>
- End Use: Consumers
- Exposure routes: Inhalation
- Potential health effects: Short-term exposure
- Value: 1036 mg/m<sup>3</sup>
- End Use: Consumers
- Exposure routes: Ingestion
- Potential health effects: Long-term systemic effects
- Value: 61 mg/kg
- 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/m<sup>3</sup>
- 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/m<sup>3</sup>
- End Use: Consumers
- Exposure routes: Ingestion
- Potential health effects: Chronic effects
- Value: 26 mg/kg
- End Use: Industrial use, Workers
- Exposure routes: Inhalation
- Potential health effects: Long-term local effects
- Value: 0,25 mg/m<sup>3</sup>

Glutaral :

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

Propan-1-ol :

- 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

Propan-2-ol :

- 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

Glutaral : Fresh water  
Value: 0,0025 mg/l

Marine water  
Value: 0,00025 mg/l

Fresh water sediment  
Value: 5,27 mg/kg

Marine sediment  
Value: 0,527 mg/kg

Soil  
Value: 0,03 mg/kg

## 8.2 Exposure controls

### Personal protective equipment

Eye protection : Tightly fitting safety goggles

### Hand protection

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

### Environmental exposure controls

General advice : Should not be released into the environment.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : alcohol-like

pH : no data available

Boiling point/boiling range : not determined

Flash point : 27 °C  
Method: DIN 51755 Part 1

Flammability (solid, gas) : not auto-flammable

Vapour pressure : no data available

Density : 0,89 g/cm<sup>3</sup> (20 °C)

Solubility(ies)

Water solubility : completely miscible

## 9.2 Other information

no data available

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## 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

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product:

#### Acute toxicity

Acute oral toxicity : LD50 Oral rat: > 5.000 mg/kg  
Method: Calculation method

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

Acute toxicity estimate : Test atmosphere: vapour  
Method: Calculation method

#### Skin corrosion/irritation

Result: No skin irritation

#### Serious eye damage/eye irritation

Result: Risk of serious damage to eyes.

**Respiratory or skin sensitisation**

Remarks: no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**STOT - single exposure**

no data available

**STOT - repeated exposure**

no data available

**Aspiration toxicity**

no data available

**Components:****Acute toxicity****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

**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

**Glutaral (CAS: 111-30-8):**

Acute oral toxicity : LD50 Oral rat: 200 mg/kg

Acute dermal toxicity : LD50 Dermal rabbit: 1.749 mg/kg

**Skin corrosion/irritation****Propan-1-ol (CAS: 71-23-8):**



Species: rabbit  
Result: No skin irritation

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

Species: rabbit  
Result: No skin irritation

**Glutaral (CAS: 111-30-8):**

Species: rabbit  
Result: Corrosive  
Method: OECD Test Guideline 404

**Serious eye damage/eye irritation****Propan-1-ol (CAS: 71-23-8):**

Species: rabbit  
Result: Irreversible effects on the eye

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

Species: rabbit  
Result: Eye irritation

**Glutaral (CAS: 111-30-8):**

Species: rabbit  
Result: Irreversible effects on the eye  
Method: Draize Test

**Respiratory or skin sensitisation****Propan-1-ol (CAS: 71-23-8):**

Test Method: Maximisation Test  
Species: guinea pig  
Result: Did not cause sensitisation on laboratory animals.  
Method: OECD Test Guideline 406

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

Test Method: Buehler Test  
Species: guinea pig  
Result: Did not cause sensitisation on laboratory animals.

**Germ cell mutagenicity****Propan-1-ol (CAS: 71-23-8):**

Genotoxicity in vitro : Type: in vitro assay  
Result: negative

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

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

**SECTION 12: Ecological information**

**12.1 Toxicity****Product:**

Toxicity to fish : LC50 (Fish): > 1.000 mg/l

**Components:****Propan-1-ol (CAS: 71-23-8):**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 4.555 mg/l  
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 : IC50 (Bacteria): > 1.000 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209

**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

**Glutaral (CAS: 111-30-8):**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 10,8 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,69 mg/l  
Exposure time: 48 h  
Test Method: Immobilization  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 2,64 mg/l  
Exposure time: 72 h  
Test Type: Growth inhibition  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1  
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,24 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity) : 1

**12.2 Persistence and degradability****Components:****Glutaral (CAS: 111-30-8):**

Biochemical Oxygen Demand : Biochemical oxygen demand

(BOD) 235 mg/g  
Incubation time: 5 d

Chemical Oxygen Demand (COD) : 1.385 mg/g

**12.3 Bioaccumulative potential**

no data available

**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

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**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 accordance with the local regulations.

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

**14.3 Transport hazard class**

ADR : 3  
IMDG : 3  
IATA : 3

**14.4 Packaging group**

ADR

Packaging group : III  
 Classification Code : F1  
 Hazard Identification Number : 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**

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

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

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

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

|   |            | Quantity1 | Quantity2 |
|---|------------|-----------|-----------|
| 6 | Flammable. | 5.000 t   | 50.000 t  |

Volatile organic compounds : Directive 1999/13/EC  
 60 %  
 VOC content excluding water

**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**

|        |   |
|--------|---|
| R11    | Highly flammable.                                       |
| R23/25 | Toxic by inhalation and if swallowed.                   |
| R34    | Causes burns.   |
| R36    | Irritating to eyes.                                     |
| R41    | Risk of serious damage to eyes.                         |
| R42/43 | May cause sensitisation by inhalation and skin contact. |
| R50    | Very toxic to aquatic organisms.                        |
| R67    | Vapours may cause drowsiness and dizziness.             |

**Full text of H-Statements**

|      |  |
|------|--|
| H225 | Highly flammable liquid and vapour.  |
| H301 | Toxic if swallowed.  |
| H314 | Causes severe skin burns and eye damage.                                   |
| H317 | May cause an allergic skin reaction.                                       |
| H318 | Causes serious eye damage.   |
| H319 | Causes serious eye irritation.   |
| H331 | Toxic if inhaled.  |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation.  |
| H336 | May cause drowsiness or dizziness.   |
| H400 | Very toxic to aquatic life.  |
| H412 | Harmful to aquatic life with long lasting effects.                         |

**Full text of other abbreviations**

|                 |  |
|-----------------|--|
| Acute Tox.      | Acute toxicity                                   |
| Aquatic Acute   | Acute aquatic toxicity                           |
| Aquatic Chronic | Chronic aquatic toxicity                         |
| Eye Dam.        | Serious eye damage                               |
| Eye Irrit.      | Eye irritation                                   |
| Flam. Liq.      | Flammable liquids                                |
| Resp. Sens.     | Respiratory sensitisation                        |
| Skin Corr.      | Skin corrosion                                   |
| Skin Sens.      | Skin sensitisation                               |
| STOT SE         | Specific target organ toxicity - single exposure |

**Safety datasheet sections which have been updated:**

2. Hazards identification

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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.