

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

Trade name : Bacillol AF Tissues

1.2 Relevant identified uses of the substance or mixture and uses advised againstUse 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 sheetManufacturer, importer, supplier : BODE Chemie GmbH
Melanchthonstraße 27
22525 Hamburg
Tel.: +49 (0)40 / 54 00 60Responsible 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.
Eye irritation , Category 2 H319: Causes serious eye irritation.**Classification (67/548/EEC, 1999/45/EC)**Flammable R10: Flammable.
Irritant R36: Irritating to eyes.**2.2 Label elements****Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.Precautionary statements : P102 Keep out of reach of children.
P210 Keep away from heat/sparks/open flames/hot

surfaces. - No smoking.

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.

Hazardous components which must be listed on the label:

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

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. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
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 SE3; H336	>= 30 - < 50
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 SE3; H336	>= 20 - < 30
Ethanol	64-17-5 200-578-6 01-2119457610-43	F; R11	Flam. Liq.2; H225	>= 1 - < 10

For explanation of abbreviations 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 possible).

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.

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.

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

- Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

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

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 : 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.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. 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. Keep tightly closed.
- Advice on common storage : Keep away from food, drink and animal feedingstuffs.

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.

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 ³ End Use: Workers Exposure routes: Inhalation Potential health effects: Short-term exposure Value: 1723 mg/m ³ 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/m ³ End Use: Consumers Exposure routes: Inhalation Potential health effects: Short-term exposure Value: 1036 mg/m ³ End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects Value: 61 mg/kg
Propan-2-ol	:	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 ³ 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 ³ End Use: Consumers Exposure routes: Ingestion Potential health effects: Chronic effects Value: 26 mg/kg
Ethanol	:	End Use: Consumers

Exposure routes: Ingestion
Value: 87 mg/kg

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

Ethanol : Fresh water
Value: 0,96 mg/l

Fresh water sediment
Value: 3,6 mg/kg

Marine water
Value: 0,76 mg/l

Soil
Value: 0,63 mg/kg

8.2 Exposure controls**Personal protective equipment**

Protective measures : No special protective equipment required.

Environmental exposure controls

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 absorbed by inert carrier material
Colour	: colourless
Odour	: pleasant
pH	: no data available
Melting point/range	: not determined
Boiling point/boiling range	: not determined
Flash point	: 25 °C Method: DIN 51755 Part 1
Flammability (solid, gas)	: no data available
Lower explosion limit	: 2 %(V)
Vapour pressure	: 41 hPa (20 °C)
Density	: 0,86 g/cm ³ (20 °C)
Solubility(ies)	
Water solubility	: soluble

9.2 Other information

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 : No dangerous reaction known under conditions of normal use.

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**

Bacillol AF Tissues

Version 1.0

Revision Date 10.06.2014

Print Date 22.01.2015

Product:**Acute toxicity**

no data available

Skin corrosion/irritation

Result: No skin irritation

Serious eye damage/eye irritation

Result: Eye irritation

Respiratory or skin sensitisation

Result: Does not cause skin sensitisation.

Germ cell mutagenicity

Genotoxicity in vitro : Remarks: no data available

Genotoxicity in vivo : Remarks: no data available

Carcinogenicity

Remarks: This information is not available.

Reproductive toxicityEffects on fertility :
Remarks: This information is not available.

Effects on fetal development. : Remarks: This information is not available.

STOT - single exposure

Remarks: no data available

STOT - repeated exposure

Remarks: no data available

Repeated dose toxicity

Remarks: This information is not 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

Ethanol (CAS: 64-17-5):
Acute oral toxicity : LD50 Oral rat: 6.200 mg/kg

Acute inhalation toxicity : LC50 rat: 124,7 mg/l
Exposure time: 4 h

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

Ethanol (CAS: 64-17-5):
Species: rabbit
Exposure time: 24 h
Result: Mild skin irritation
Method: Draize Test

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

Ethanol (CAS: 64-17-5):
Species: rabbit
Exposure time: 24 h
Result: Mild eye irritation
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 : Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: no data available

Toxicity to algae : Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: no data available

Toxicity to bacteria :
Remarks: no data available**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 testToxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3.644 mg/l
Exposure time: 48 h
Method: DIN 38412Toxicity to algae : NOEC (Chlorella vulgaris (Fresh water algae)): 1.150 mg/l
Exposure time: 48 hToxicity 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

Ethanol (CAS: 64-17-5):

- Toxicity to fish : LC50 (Fish): 13.000 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 12.340 mg/l
Exposure time: 48 h
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 5.000 mg/l
Exposure time: 72 h

12.2 Persistence and degradability**Product:**

- Biodegradability : Remarks: no data available

12.3 Bioaccumulative potential**Product:**

- Bioaccumulation : Remarks: no data available

12.4 Mobility in soil**Product:**

- Distribution among environmental compartments : Remarks: 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**Product:**

- Adsorbed organic bound halogens (AOX) : Remarks: 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.
The following Waste Codes are only suggestions:

Waste Code EU : 160305 * organic wastes containing dangerous substances

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**

ADR : UN 3175
IMDG : UN 3175
IATA : UN 3175

14.2 UN proper shipping name

ADR : SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (n-propanol, isopropanol)
IMDG : SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (n-propanol, isopropanol)
IATA : SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (n-propanol, isopropanol)

14.3 Transport hazard class

ADR : 4.1
IMDG : 4.1
IATA : 4.1

14.4 Packaging group

ADR
Packaging group : II
Classification Code : F1
Hazard Identification Number : 40
Labels : 4.1
Tunnel restriction code : E
IMDG
Packaging group : II
Labels : 4.1
EmS Number : F-A, S-I
IATA
Packaging group : II
Labels : 4.1

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
74,73 %
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.

SECTION 16: Other information**Full text of R-Phrases**

R11	Highly flammable.
R36	Irritating to eyes.
R41	Risk of serious damage to eyes.
R67	Vapours may cause drowsiness and dizziness.

Full text of H-Statements

H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Full text of other abbreviations

Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
STOT SE	Specific target organ toxicity - single exposure

Safety datasheet sections which have been updated:

2. Hazards identification

Bacillof AF Tissues

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.