

# SAFETY DATA SHEET

## Mikrobac Tissues

Version 1.4      Revision Date: 03.01.2018      SDS Number: R11542      Date of last issue: 07.11.2017  
Date of first issue: 26.04.2016

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Mikrobac Tissues

Product code : R11542

#### 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 algaecides not intended for direct application to humans or animals  
Food and feed area disinfectants  
For further information, refer to the product technical data sheet.

Restrictions on use : Restricted to professional users.

### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Chronic aquatic toxicity : Category 3

#### GHS label elements

Hazard pictograms : None

Signal word : None

Hazard statements : H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P273 Avoid release to the environment.

#### Other hazards which do not result in classification

None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name : Mikrobac Tissues

#### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Didecyldimethylammonium chloride	7173-51-5	>= 0,1 - < 1

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Benzyl-C12-18-alkyldimethylammonium chlorides	68391-01-5	$\geq 0,1 - < 1$
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### 4. FIRST AID MEASURES

General advice	:	If you feel unwell, seek medical advice (show the label where possible).
In case of skin contact	:	Wash off with soap and water.
Most important symptoms and effects, both acute and delayed	:	None known.
Notes to physician	:	For specialist advice physicians should contact the Poisons Information Service.

### 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	none
Hazardous combustion products	:	No hazardous combustion products are known
Specific extinguishing methods	:	Standard procedure for chemical fires.
Special protective equipment for firefighters	:	Use personal protective equipment. In the event of fire, wear self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation.
Environmental precautions	:	Should not be released into the environment.
Methods and materials for containment and cleaning up	:	Use mechanical handling equipment.

### 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	No special protective measures against fire required.
Conditions for safe storage	:	Store at room temperature in the original container.
Materials to avoid	:	Keep away from food and drink.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### Personal protective equipment

##### Hand protection

##### Nitrile rubber

Material	:	Protective gloves complying with EN 374.
Break through time	:	480 min
Glove thickness	:	0,1 mm

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Protective index	: Class 6
Remarks	: Nitrile rubber
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid absorbed by inert carrier material
Colour	: colourless
Odour	: slight
pH	: 8 (20 °C)
Melting point/range	: not determined
Boiling point/boiling range	: not determined
Flash point	: Not applicable
Flammability (solid, gas)	: not auto-flammable
Vapour pressure	: No data available
Density	: 1 g/cm <sup>3</sup> (20 °C)
Solubility(ies) Water solubility	: completely miscible

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### 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	: Heat Strong sunlight for prolonged periods.
Incompatible materials	: None.

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### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

##### Product:

Acute oral toxicity	: Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method
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##### Components:

##### **Didecyldimethylammonium chloride** (CAS: 7173-51-5):

Acute oral toxicity	: LD50 Oral (Rat): 238 mg/kg Method: OECD Test Guideline 401
Acute dermal toxicity	: LD50 Dermal (Rabbit): 3.342 mg/kg

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

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

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

### **Skin corrosion/irritation**

#### **Product:**

Result: No skin irritation

#### **Components:**

Didecyldimethylammonium chloride (CAS: 7173-51-5):

Species: Rabbit

Exposure time: 3 min

Method: OECD Test Guideline 404

Result: Corrosive after 3 minutes or less of exposure

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

Species: Rabbit

Result: Corrosive after 3 minutes to 1 hour of exposure

### **Serious eye damage/eye irritation**

#### **Product:**

Result: No eye irritation

#### **Components:**

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

Species: Rabbit

Result: Corrosive

### **Respiratory or skin sensitisation**

#### **Product:**

Result: Does not cause skin sensitisation.

#### **Components:**

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.

### **Germ cell mutagenicity**

No data available

### **Carcinogenicity**

No data available

### **Reproductive toxicity**

No data available

### **STOT - single exposure**

No data available

**Mikrobac Tissues****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

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**12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:**

Didecyldimethylammonium chloride (CAS: 7173-51-5):

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0,19 mg/l  
 Exposure time: 96 h  
 Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,062 mg/l  
 Exposure time: 48 h  
 Method: OECD Test Guideline 202

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,026 mg/l  
 Exposure time: 72 h  
 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: Danio rerio (zebra fish)  
 Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,014 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  
 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

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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)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,0042 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
M-Factor (Chronic aquatic toxicity)	:	1

### Persistence and degradability

#### Product:

Biodegradability : Remarks: No data available

#### Components:

Didecyldimethylammonium chloride (CAS: 7173-51-5):

Biodegradability : Method: Modified Sturm Test  
Remarks: Readily biodegradable, according to appropriate OECD test.

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

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## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues	:	In accordance 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.

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## 14. TRANSPORT INFORMATION

### 14.1 UN number

Not regulated as a dangerous good

### 14.2 UN proper shipping name

Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

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### 14.4 Packing group

Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Not applicable

### 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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## 15. REGULATORY INFORMATION

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

**International Regulations**

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## 16. OTHER INFORMATION

### Full text of other abbreviations

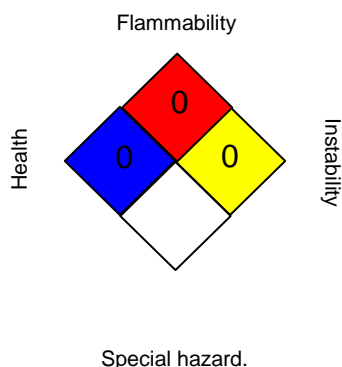
AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute 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

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### Further information

#### NFPA:



#### HMIS® IV:

HEALTH		0
FLAMMABILITY		0
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.

### 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.

TC / EN