

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : Bechtozid plus  
Product code : REF 544N, 544, 544.5, 544.10N, 544.10

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Medical device  
Germicide  
Cleaning agent

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Alfred Becht GmbH  
Carl-Zeiss-Str. 16  
P.O. Box 1145  
77656 Offenburg  
T +49 781 60586-0 - F +49 781 60586-40

##### Email competent person

sds@kft.de

#### 1.4. Emergency telephone number

Emergency number : Poisoning Information Centre Freiburg + 49 761 19240

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

|   |      |
|---|------|
| Flammable liquids, Category 3                                     | H226 |
| Serious eye damage/eye irritation, Category 1                     | H318 |
| Hazardous to the aquatic environment – Chronic Hazard, Category 3 | H412 |
| Full text of H- and EUH-statements: see section 16                |      |

##### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

|                                |  |       |
|--------------------------------|--|-------|
|                                | GHS02  | GHS05 |
| Signal word (CLP)              | : Danger   |       |
| Contains                       | : n-propanol   |       |
| Hazard statements (CLP)        | : H226 - Flammable liquid and vapour.<br>H318 - Causes serious eye damage.<br>H412 - Harmful to aquatic life with long lasting effects.  |       |
| Precautionary statements (CLP) | : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.<br>No smoking.<br>P273 - Avoid release to the environment.<br>P280 - Wear eye protection.<br>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P310 - Immediately call a POISON CENTER, a doctor. |       |

### 2.3. Other hazards

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

| Component  |   |
|--|---|
| Ethanol (64-17-5)  | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| n-propanol (71-23-8)   | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| didecyltrimethylammonium chloride (7173-51-5)  | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)               | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name  | Product identifier  | %                | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|------------------|---|
| Ethanol<br>substance with national workplace exposure limit(s) (DE) | CAS-No.: 64-17-5<br>EC-No.: 200-578-6<br>EC Index-No.: 603-002-00-5 | $\geq 10 - < 20$ | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319                        |
| n-propanol  | CAS-No.: 71-23-8<br>EC-No.: 200-746-9<br>EC Index-No.: 603-003-00-0 | $\geq 5 - < 10$  | Flam. Liq. 2, H225<br>Eye Dam. 1, H318<br>STOT SE 3, H336       |

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Name  | Product identifier  | %            | Classification according to Regulation (EC) No. 1272/2008 [CLP]  |
|---|---|--------------|--|
| didcyldimethylammonium chloride   | CAS-No.: 7173-51-5<br>EC-No.: 230-525-2<br>EC Index-No.: 612-131-00-6 | ≥0,25 - <0,8 | Acute Tox. 3 (Oral), H301 (ATE=264 mg/kg bodyweight)<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Aquatic Acute 1, H400 (M=10)<br>Aquatic Chronic 2, H411 |
| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides               | CAS-No.: 68424-85-1<br>EC-No.: 270-325-2                              | ≥0,25 - <0,8 | Acute Tox. 4 (Oral), H302 (ATE=795 mg/kg bodyweight)<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Aquatic Acute 1, H400 (M=10)<br>Aquatic Chronic 1, H410 |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | CAS-No.: 85409-23-0<br>EC-No.: 287-090-7                              | ≥0,25 - <0,8 | Acute Tox. 4 (Oral), H302 (ATE=344 mg/kg bodyweight)<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Aquatic Acute 1, H400 (M=10)<br>Aquatic Chronic 1, H410 |

| Specific concentration limits: |   |                                   |
|--------------------------------|---|-----------------------------------|
| Name                           | Product identifier  | Specific concentration limits     |
| Ethanol                        | CAS-No.: 64-17-5<br>EC-No.: 200-578-6<br>EC Index-No.: 603-002-00-5 | ( 50 ≤C < 100) Eye Irrit. 2, H319 |

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures general            | : When in doubt or if symptoms are observed, get medical advice.   |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing.   |
| First-aid measures after skin contact | : Rinse skin with water/shower. Take off immediately all contaminated clothing. Get medical advice if skin irritation persists.                      |
| First-aid measures after eye contact  | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. |
| First-aid measures after ingestion    | : Rinse mouth out with water. Call a poison center or a doctor if you feel unwell.   |

### 4.2. Most important symptoms and effects, both acute and delayed

|                                    |                           |
|------------------------------------|---------------------------|
| Symptoms/effects after eye contact | : Serious damage to eyes. |
|------------------------------------|---------------------------|

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                |  |
|--------------------------------|--|
| Suitable extinguishing media   | : Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Strong water jet.  |

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 5.2. Special hazards arising from the substance or mixture

|  |   |
|--|---|
| Fire hazard                                      | : Highly flammable liquid and vapour.   |
| Explosion hazard                                 | : Explosive vapour/air mixtures may be formed.  |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. Hydrogen chloride. Carbon monoxide. Carbon dioxide. Nitrogen oxides. |

### 5.3. Advice for firefighters

|                                |  |
|--------------------------------|--|
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
| Other information              | : Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.     |

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

|                  |  |
|------------------|--|
| General measures | : Remove all sources of ignition. Avoid contact with skin and eyes. Ensure adequate air ventilation. |
|------------------|--|

#### 6.1.1. For non-emergency personnel

|                      |   |
|----------------------|---|
| Emergency procedures | : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. |
|----------------------|---|

#### 6.1.2. For emergency responders

|                      |   |
|----------------------|---|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
|----------------------|---|

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid sub-soil penetration. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

|                         |  |
|-------------------------|--|
| Methods for cleaning up | : Take up liquid spill into absorbent material. Cover spill with non combustible material, e.g.: sand/earth. Notify authorities if product enters sewers or public waters. |
| Other information       | : Dispose of materials or solid residues at an authorized site.  |

### 6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

|                                   |   |
|-----------------------------------|---|
| Additional hazards when processed | : In use, may form flammable vapour-air mixture.  |
| Precautions for safe handling     | : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. |
| Hygiene measures                  | : Immediately remove contaminated or damp clothing. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.   |

### 7.2. Conditions for safe storage, including any incompatibilities

|  |  |
|--|--|
| Storage conditions                                       | : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Protect against frost. |
| Information about storage in one common storage facility | : Keep away from food, drink and animal feeding stuffs.  |

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 7.3. Specific end use(s)

Follow the directions!.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

| Ethanol (64-17-5)                                 |  |
|---|--|
| Germany - Occupational Exposure Limits (TRGS 900) |  |
| Local name  | Ethanol  |
| AGW (OEL TWA) [1]                                 | 380 mg/m <sup>3</sup>  |
| AGW (OEL TWA) [2]                                 | 200 ppm  |
| Peak exposure limitation factor                   | 4(II)  |
| Remark  | DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden |
| Regulatory reference                              | TRGS900  |

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

| didecyldimethylammonium chloride (7173-51-5)                                       |                          |
|--|--------------------------|
| PNEC (Water)   |                          |
| PNEC aqua (freshwater)   | 0.0011 mg/l              |
| PNEC aqua (marine water)   | 0.00011 mg/l             |
| PNEC aqua (intermittent, freshwater)   | 0.00021 mg/l             |
| PNEC aqua (intermittent, marine water)   | 0.000021 mg/l            |
| PNEC (Sediment)  |                          |
| PNEC sediment (freshwater)   | 61.86 mg/kg dwt          |
| PNEC sediment (marine water)   | 6.186 mg/kg dwt          |
| PNEC (Soil)  |                          |
| PNEC soil  | 1.4 mg/kg dwt            |
| PNEC (STP)   |                          |
| PNEC sewage treatment plant  | 0.14 mg/l                |
| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1) |                          |
| DNEL/DMEL (Workers)  |                          |
| Long-term - systemic effects, dermal   | 5.7 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation   | 3.96 mg/m <sup>3</sup>   |

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)               |                           |
|--|---------------------------|
| DNEL/DMEL (General population)   |                           |
| Long-term - systemic effects, oral   | 3.4 mg/kg bodyweight/day  |
| Long-term - systemic effects, inhalation   | 1.64 mg/m <sup>3</sup>    |
| Long-term - systemic effects, dermal   | 3.4 mg/kg bodyweight/day  |
| PNEC (Water)   |                           |
| PNEC aqua (freshwater)   | 0.0009 mg/l               |
| PNEC aqua (marine water)   | 0.00096 mg/l              |
| PNEC aqua (intermittent, freshwater)   | 0.00016 mg/l              |
| PNEC (Sediment)  |                           |
| PNEC sediment (freshwater)   | 12.27 mg/kg dwt           |
| PNEC sediment (marine water)   | 13.09 mg/kg dwt           |
| PNEC (Soil)  |                           |
| PNEC soil  | 7 mg/kg dwt               |
| PNEC (STP)   |                           |
| PNEC sewage treatment plant  | 0.4 mg/l                  |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0) |                           |
| DNEL/DMEL (Workers)  |                           |
| Long-term - local effects, inhalation  | 1 mg/m <sup>3</sup>       |
| DNEL/DMEL (General population)   |                           |
| Long-term - local effects, inhalation  | 1 mg/m <sup>3</sup>       |
| PNEC (Water)   |                           |
| PNEC aqua (freshwater)   | 0.000415 mg/l             |
| PNEC aqua (marine water)   | 0.000042 mg/l             |
| PNEC aqua (intermittent, freshwater)   | 0.000154 mg/l             |
| PNEC aqua (intermittent, marine water)   | 0.000154 mg/l             |
| PNEC (Sediment)  |                           |
| PNEC sediment (freshwater)   | 6.81 mg/kg dwt            |
| PNEC sediment (marine water)   | 0.681 mg/kg dwt           |
| PNEC (Soil)  |                           |
| PNEC soil  | 1.36 mg/kg dwt            |
| PNEC (STP)   |                           |
| PNEC sewage treatment plant  | 0.21 mg/l                 |
| Ethanol (64-17-5)  |                           |
| DNEL/DMEL (Workers)  |                           |
| Long-term - systemic effects, dermal   | 8238 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation   | 380 mg/m <sup>3</sup>     |
| DNEL/DMEL (General population)   |                           |
| Long-term - systemic effects, inhalation   | 114 mg/m <sup>3</sup>     |

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Ethanol (64-17-5)                        |                          |
|--|--------------------------|
| PNEC (Water)                             |                          |
| PNEC aqua (freshwater)                   | 0.96 mg/l                |
| PNEC aqua (marine water)                 | 0.79 mg/l                |
| PNEC aqua (intermittent, freshwater)     | 2.75 mg/l                |
| PNEC (Sediment)                          |                          |
| PNEC sediment (freshwater)               | 3.6 mg/kg dwt            |
| PNEC sediment (marine water)             | 2.9 mg/kg dwt            |
| PNEC (Soil)                              |                          |
| PNEC soil                                | 0.63 mg/kg dwt           |
| PNEC (Oral)                              |                          |
| PNEC oral (secondary poisoning)          | 0.38 kg/kg food          |
| PNEC (STP)                               |                          |
| PNEC sewage treatment plant              | 580 mg/l                 |
| n-propanol (71-23-8)                     |                          |
| DNEL/DMEL (Workers)                      |                          |
| Acute - systemic effects, inhalation     | 1723 mg/m <sup>3</sup>   |
| Long-term - systemic effects, dermal     | 136 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 268 mg/m <sup>3</sup>    |
| DNEL/DMEL (General population)           |                          |
| Acute - systemic effects, inhalation     | 1036 mg/m <sup>3</sup>   |
| Long-term - systemic effects, oral       | 61 mg/kg bodyweight/day  |
| Long-term - systemic effects, inhalation | 80 mg/m <sup>3</sup>     |
| Long-term - systemic effects, dermal     | 81 mg/kg bodyweight/day  |
| PNEC (Water)                             |                          |
| PNEC aqua (freshwater)                   | 6.83 mg/l                |
| PNEC aqua (marine water)                 | 0.683 mg/l               |
| PNEC (Sediment)                          |                          |
| PNEC sediment (freshwater)               | 27.5 mg/kg dwt           |
| PNEC sediment (marine water)             | 2.75 mg/kg dwt           |
| PNEC (Soil)                              |                          |
| PNEC soil                                | 1.49 mg/kg dwt           |
| PNEC (STP)                               |                          |
| PNEC sewage treatment plant              | 96 mg/l                  |

### 8.1.5. Control banding

No additional information available

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### 8.2.2. Personal protection equipment

##### 8.2.2.1. Eye and face protection

##### Eye protection:

Sealed safety goggles. EN 166

##### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing. EN 13034. EN ISO 13688

##### Hand protection:

Chemically resistant protective gloves. EN 374. Chloroprene rubber. Natural rubber. Nitrile rubber. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

##### 8.2.2.3. Respiratory protection

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Short term exposure. Breathing apparatus with filter. A-P2. Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust. For details on conditions of use and maximum use concentrations, see DGUV Regulation 112-190 - Use of respiratory protective equipment.

##### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

##### Environmental exposure controls:

Avoid release to the environment.

##### Other information:

Do not breathe mist, vapours, Aerosol. Take off immediately all contaminated clothing. Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Always wash hands after handling the product. Apply emollient cream.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                           |  |
|---------------------------|--|
| Physical state            | : Liquid   |
| Colour                    | : white.   |
| Odour                     | : perfumed.  |
| Odour threshold           | : Not available  |
| Melting point             | : Not applicable   |
| Freezing point            | : Not available  |
| Boiling point             | : Not available  |
| Flammability              | : Not applicable   |
| Explosive properties      | : Product is not explosive. Explosive vapour/air mixtures may be formed. |
| Oxidising properties      | : Non oxidizing.   |
| Explosive limits          | : Not available  |
| Lower explosion limit     | : Not available  |
| Upper explosion limit     | : Not available  |
| Flash point               | : 28 °C (DIN EN ISO 3679)  |
| Auto-ignition temperature | : Not available  |
| Decomposition temperature | : Not available  |
| pH                        | : < 10   |
| Viscosity, kinematic      | : Not available  |



# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

|   |                          |
|---|--------------------------|
| Viscosity, dynamic                              | : 3 mPa.s                |
| Solubility                                      | : Water: Miscible        |
| Partition coefficient n-octanol/water (Log Kow) | : Not available          |
| Partition coefficient n-octanol/water (Log Pow) | : Not applicable         |
| Vapour pressure                                 | : Not available          |
| Vapour pressure at 50°C                         | : Not available          |
| Density   | : 0.95 g/cm <sup>3</sup> |
| Relative density                                | : Not available          |
| Relative vapour density at 20°C                 | : Not available          |
| Particle characteristics                        | : Not applicable         |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Highly flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Acids. Strong oxidizing agent.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

|                             |   |
|-----------------------------|---|
| Acute toxicity (oral)       | : Not classified (Based on available data, the classification criteria are not met) |
| Acute toxicity (dermal)     | : Not classified (Based on available data, the classification criteria are not met) |
| Acute toxicity (inhalation) | : Not classified (Based on available data, the classification criteria are not met) |

| Bechtozid plus   |  |
|--|--|
| ATE CLP (oral)   | 88442 mg/kg bodyweight                           |
| didcyldimethylammonium chloride (7173-51-5)  |  |
| LD50 oral rat  | 264 mg/kg bodyweight (female; (OECD 401 method)) |
| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1) |  |
| LD50 oral rat  | 795 mg/kg (OECD 401 method)                      |

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0)

|                                   |   |
|-----------------------------------|---|
| LD50 oral rat                     | 344 mg/kg bodyweight  |
| Skin corrosion/irritation         | : Not classified (Based on available data, the classification criteria are not met)<br>pH: < 10 |
| Serious eye damage/irritation     | : Causes serious eye damage.<br>pH: < 10  |
| Respiratory or skin sensitisation | : Not classified (Based on available data, the classification criteria are not met)             |
| Germ cell mutagenicity            | : Not classified (Based on available data, the classification criteria are not met)             |
| Carcinogenicity                   | : Not classified (Based on available data, the classification criteria are not met)             |
| Reproductive toxicity             | : Not classified (Based on available data, the classification criteria are not met)             |
| STOT-single exposure              | : Not classified (Based on available data, the classification criteria are not met)             |

### n-propanol (71-23-8)

|                        |   |
|------------------------|---|
| STOT-single exposure   | May cause drowsiness or dizziness.  |
| STOT-repeated exposure | : Not classified (Based on available data, the classification criteria are not met) |
| Aspiration hazard      | : Not classified (Based on available data, the classification criteria are not met) |

## 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

|   |   |
|---|---|
| Hazardous to the aquatic environment, short-term (acute)  | : Not classified (Based on available data, the classification criteria are not met) |
| Hazardous to the aquatic environment, long-term (chronic) | : Harmful to aquatic life with long lasting effects.                                |

### didecyldimethylammonium chloride (7173-51-5)

|                        |   |
|------------------------|---|
| LC50 - Fish [1]        | 0.49 mg/l (96 h; Brachydanio rerio (zebra-fish); (OECD 203 method)) |
| EC50 - Crustacea [1]   | ≈ 0.057 mg/l (48 h; Daphnia magna; (OECD 202 method))               |
| ErC50 algae            | 0.062 mg/l (72 h; Pseudokirchnerella subcapitata (OECD 201 method)) |
| NOEC chronic crustacea | 0.021 mg/l (21 d; Daphnia magna; (OECD 211 method))                 |
| NOEC chronic algae     | 0.013 mg/l (OECD 201 method)  |

### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)

|                        |  |
|------------------------|--|
| LC50 - Fish [1]        | 0.85 mg/l (96 h; Pimephales promelas; (OECD 203 method))             |
| EC50 - Crustacea [1]   | 0.016 mg/l (48 h; Daphnia magna; (OECD 202 method))                  |
| ErC50 algae            | 0.03 mg/l (96 h; Pseudokirchneriella subcapitata; (OECD 201 method)) |
| NOEC chronic crustacea | 0.025 mg/l (21 d; Daphnia magna; (OECD 211 method))                  |

### Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0)

|                        |   |
|------------------------|---|
| LC50 - Fish [1]        | ≈ 1.06 mg/l (96 h; Oncorhynchus mykiss; (OECD 203 method))              |
| EC50 - Crustacea [1]   | 0.01 – 0.015 mg/l (48 h; Daphnia magna; (OECD 202 method))              |
| ErC50 algae            | ≈ 0.026 mg/l (72 h; Pseudokirchneriella subcapitata; (OECD 201 method)) |
| NOEC chronic fish      | ≥ 0.0322 mg/l (28 d; Pimephales promelas)                               |
| NOEC chronic crustacea | ≥ 0.00415 mg/l (21 d; Daphnia magna)                                    |
| NOEC chronic algae     | 0.006 mg/l (72 h; Pseudokirchneriella subcapitata; (OECD 201 method))   |

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 12.2. Persistence and degradability

#### Bechtozid plus

|                               |                                  |
|-------------------------------|----------------------------------|
| Persistence and degradability | The product has not been tested. |
|-------------------------------|----------------------------------|

#### didecyldimethylammonium chloride (7173-51-5)

|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
|-------------------------------|------------------------|

#### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)

|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
|-------------------------------|------------------------|

|                |                           |
|----------------|---------------------------|
| Biodegradation | > 60 % (OECD 301D method) |
|----------------|---------------------------|

#### Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0)

|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
|-------------------------------|------------------------|

|                |  |
|----------------|--|
| Biodegradation | 95.5 % (28 d; aerobic; (OECD 301B method)) |
|----------------|--|

#### Ethanol (64-17-5)

|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
|-------------------------------|------------------------|

|                |             |
|----------------|-------------|
| Biodegradation | 84 % (20 d) |
|----------------|-------------|

#### n-propanol (71-23-8)

|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
|-------------------------------|------------------------|

|                |             |
|----------------|-------------|
| Biodegradation | 75 % (20 d) |
|----------------|-------------|

### 12.3. Bioaccumulative potential

#### Bechtozid plus

|   |                |
|---|----------------|
| Partition coefficient n-octanol/water (Log Pow) | Not applicable |
|---|----------------|

|                           |                                  |
|---------------------------|----------------------------------|
| Bioaccumulative potential | The product has not been tested. |
|---------------------------|----------------------------------|

#### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)

|                                     |                      |
|-------------------------------------|----------------------|
| Bioconcentration factor (BCF REACH) | 79 (OECD 305 method) |
|-------------------------------------|----------------------|

|   |                        |
|---|------------------------|
| Partition coefficient n-octanol/water (Log Kow) | 2.88 (OECD 107 method) |
|---|------------------------|

#### Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0)

|   |                                   |
|---|-----------------------------------|
| Partition coefficient n-octanol/water (Log Pow) | ≈ 2.48 (20 °C; (OECD 107 method)) |
|---|-----------------------------------|

|                           |                                |
|---------------------------|--------------------------------|
| Bioaccumulative potential | Low bioaccumulation potential. |
|---------------------------|--------------------------------|

#### Ethanol (64-17-5)

|   |               |
|---|---------------|
| Partition coefficient n-octanol/water (Log Kow) | -0.35 (20 °C) |
|---|---------------|

|                           |                           |
|---------------------------|---------------------------|
| Bioaccumulative potential | Bioaccumulation unlikely. |
|---------------------------|---------------------------|

#### n-propanol (71-23-8)

|   |                                      |
|---|--------------------------------------|
| Partition coefficient n-octanol/water (Log Pow) | 0.2 (25 °C; pH 7; (OECD 117 method)) |
|---|--------------------------------------|

### 12.4. Mobility in soil

#### Bechtozid plus

|                |                                  |
|----------------|----------------------------------|
| Ecology - soil | The product has not been tested. |
|----------------|----------------------------------|

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### didecyltrimethylammonium chloride (7173-51-5)

|                 |                              |
|-----------------|------------------------------|
| Surface tension | 25.82 mN/m (OECD 115 method) |
|-----------------|------------------------------|

### Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0)

|                |                      |
|----------------|----------------------|
| Ecology - soil | Low mobility (soil). |
|----------------|----------------------|

### Ethanol (64-17-5)

|                 |                    |
|-----------------|--------------------|
| Surface tension | 22.31 mN/m (20 °C) |
|-----------------|--------------------|

### n-propanol (71-23-8)

|  |   |
|--|---|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0.633 (Quantitative structure-activity relationship (QSAR)) |
|--|---|

## 12.5. Results of PBT and vPvB assessment

### Bechtozid plus

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

## 12.6. Endocrine disrupting properties

No additional information available

## 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|  |   |
|--|---|
| Waste treatment methods                    | : Disposal must be done according to official regulations. European waste catalogue.  |
| Sewage disposal recommendations            | : Do not allow into drains or water courses.  |
| Product/Packaging disposal recommendations | : Do not dispose of with domestic waste. Recycle or dispose of in compliance with current legislation.  |
| European List of Waste (LoW) code          | : 07 01 01* - aqueous washing liquids and mother liquors  |
| HP Code                                    | : HP3 - "Flammable:"<br>– flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;<br>– flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;<br>– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;<br>– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;<br>– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;<br>– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.<br>HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.<br>HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment |






## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| ADR   | IMDG  | IATA  | ADN   | RID   |
|---|---|---|---|---|
| <b>14.1. UN number or ID number</b>   |   |   |   |   |
| UN 1993   | UN 1993   | UN 1993   | UN 1993   | UN 1993   |
| <b>14.2. UN proper shipping name</b>  |   |   |   |   |
| FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-1-ol)                                  | FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-1-ol)                                  | Flammable liquid, n.o.s. (ethanol ; propan-1-ol)                                  | FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-1-ol)                                    | FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-1-ol)                                    |
| <b>Transport document description</b>   |   |   |   |   |
| UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-1-ol), 3, III, (D/E)           | UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-1-ol), 3, III                  | UN 1993 Flammable liquid, n.o.s. (ethanol ; propan-1-ol), 3, III                  | UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-1-ol), 3, III                    | UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol ; propan-1-ol), 3, III                    |
| <b>14.3. Transport hazard class(es)</b>   |   |   |   |   |
| 3   | 3   | 3   | 3   | 3   |
|  |  |  |  |  |
| <b>14.4. Packing group</b>  |   |   |   |   |
| III   | III   | III   | III   | III   |
| <b>14.5. Environmental hazards</b>  |   |   |   |   |
| Dangerous for the environment: No   | Dangerous for the environment: No<br>Marine pollutant: No                         | Dangerous for the environment: No   | Dangerous for the environment: No   | Dangerous for the environment: No   |
| No supplementary information available  |   |   |   |   |

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) : F1  
Special provisions (ADR) : 274, 601  
Limited quantities (ADR) : 5I  
Excepted quantities (ADR) : E1  
Transport category (ADR) : 3  
Hazard identification number (Kemler No.) : 30  
Orange plates :



Tunnel restriction code (ADR) : D/E

#### Transport by sea

Special provisions (IMDG) : 223, 274, 955  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
EmS-No. (Fire) : F-E  
EmS-No. (Spillage) : S-E

#### Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y344  
PCA limited quantity max net quantity (IATA) : 10L  
PCA packing instructions (IATA) : 355  
PCA max net quantity (IATA) : 60L

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

CAO max net quantity (IATA) : 220L  
Special provisions (IATA) : A3

### Inland waterway transport

Classification code (ADN) : F1  
Special provisions (ADN) : 274, 601  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Carriage permitted (ADN) : T

### Rail transport

Classification code (RID) : F1  
Special provisions (RID) : 274, 601  
Limited quantities (RID) : 5L  
Excepted quantities (RID) : E1  
Transport category (RID) : 3  
Hazard identification number (RID) : 30

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Other information, restriction and prohibition regulations : Take note of Directive 94/33/EC on the protection of young people at work.

#### REACH Annex XVII (Restriction List)

| EU restriction list (REACH Annex XVII) |                                       |
|--|---------------------------------------|
| Reference code                         | Applicable on                         |
| 3(a)                                   | Bechtozid plus ; Ethanol ; n-propanol |
| 3(b)                                   | Bechtozid plus ; Ethanol ; n-propanol |
| 3(c)                                   | Bechtozid plus                        |
| 40.                                    | Ethanol ; n-propanol                  |

#### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List) in concentrations above or equal to the limit values

#### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

#### PIC Regulation (Prior Informed Consent)

Contains substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals):  
Didecyldimethylammonium chloride (7173-51-5)

#### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Seveso Directive (Disaster Risk Reduction)

| Seveso III Part I (Categories of dangerous substances)                                   | Qualifying quantity (tonnes) |            |
|--|------------------------------|------------|
|  | Lower-tier                   | Upper-tier |
| P5c FLAMMABLE LIQUIDS<br>Flammable liquids, Categories 2 or 3 not covered by P5a and P5b | 5000                         | 50000      |

### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### 15.1.2. National regulations

#### Germany

|  |   |
|--|---|
| National Rules and Recommendations         | : TRGS 400: Risk Assessment for Activities Involving Hazardous Substances.<br>TRGS 510: Storage of hazardous substances in non-stationary containers.<br>TRGS 500: Protective measures.<br>TRGS 520: Construction and operation of collection points and temporary storage for small amounts of hazardous waste.<br>TRGS 900: Occupational Exposure Limits. |
| Water hazard class (WGK)                   | : WGK 2, Significantly hazardous to water.  |
| WGK remark                                 | : Classification according to AwSV.   |
| Storage class (LGK, TRGS 510)              | : LGK 3 - Flammable liquids.  |
| Hazardous Incident Ordinance (12. BImSchV) | : Listed in the 12. BImSchV (Annex I) under: 1.2.5.3<br>- Quantity threshold for operational area under § 1 para. 1<br>- Sentence 1 :50000000 kg<br>- Sentence 2 :50000000 kg   |

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Indication of changes:

General revision.

| Indication of changes |              |        |          |
|-----------------------|--------------|--------|----------|
| Section               | Changed item | Change | Comments |
|                       |              |        |          |

| Abbreviations and acronyms: |   |
|-----------------------------|---|
| 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             |
| BCF                         | Bioconcentration factor   |
| CLP                         | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                     |
| EC50                        | Median effective concentration  |
| IATA                        | International Air Transport Association   |
| IMDG                        | International Maritime Dangerous Goods  |
| LC50                        | Median lethal concentration   |
| LD50                        | Median lethal dose  |

# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Abbreviations and acronyms:

|       |   |
|-------|---|
| PBT   | Persistent Bioaccumulative Toxic  |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| RID   | Regulations concerning the International Carriage of Dangerous Goods by Rail                      |
| SDS   | Safety Data Sheet   |
| vPvB  | Very Persistent and Very Bioaccumulative  |
| ATE   | Acute Toxicity Estimate   |
| IARC  | International Agency for Research on Cancer   |
| LOAEL | Lowest Observed Adverse Effect Level  |
| NOAEC | No-Observed Adverse Effect Concentration  |
| NOAEL | No-Observed Adverse Effect Level  |
| NOEC  | No-Observed Effect Concentration  |
| OECD  | Organisation for Economic Co-operation and Development  |
| PNEC  | Predicted No-Effect Concentration   |
| STP   | Sewage treatment plant  |
| DMEL  | Derived Minimal Effect level  |
| DNEL  | Derived-No Effect Level   |
| TLM   | Median Tolerance Limit  |

Data sources : Information provided by the manufacturer. MSDSs of the suppliers. European Chemicals Agency, <http://echa.europa.eu/>.

Department issuing data specification sheet: : KFT Chemieservice GmbH  
Im Leuschnerpark 3  
D-64347 Griesheim

Phone: +49 6155-8981-400  
Fax: +49 6155 8981-500  
SDS Service: +49 6155 8981-522

Contact person : Dr. Maximilian Gatterdam

Other information : Version/s 1.00 is/are not available in this language.

### Full text of H- and EUH-statements:

|                     |   |
|---------------------|---|
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3                                 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4                                 |
| Aquatic Acute 1     | Hazardous to the aquatic environment – Acute Hazard, Category 1   |
| Aquatic Chronic 1   | Hazardous to the aquatic environment – Chronic Hazard, Category 1 |
| Aquatic Chronic 2   | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| Aquatic Chronic 3   | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| Eye Dam. 1          | Serious eye damage/eye irritation, Category 1                     |
| Eye Irrit. 2        | Serious eye damage/eye irritation, Category 2                     |
| Flam. Liq. 2        | Flammable liquids, Category 2                                     |
| Flam. Liq. 3        | Flammable liquids, Category 3                                     |
| H225                | Highly flammable liquid and vapour.                               |
| H226                | Flammable liquid and vapour.                                      |



# Bechtozid plus

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Full text of H- and EUH-statements:

|               |  |
|---------------|--|
| H301          | Toxic if swallowed.  |
| 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.                  |
| H411          | Toxic to aquatic life with long lasting effects.                       |
| H412          | Harmful to aquatic life with long lasting effects.                     |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1, Sub-Category 1B                 |
| STOT SE 3     | Specific target organ toxicity – Single exposure, Category 3, Narcosis |

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

|                   |      |                       |
|-------------------|------|-----------------------|
| Flam. Liq. 3      | H226 | On basis of test data |
| Eye Dam. 1        | H318 | Calculation method    |
| Aquatic Chronic 3 | H412 | Calculation method    |

KFT SDS EU 01

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.