This SDS packet was issued with item:
076366223

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

076366025
1 Identification of the substance/mixture and of the company/undertaking

- Trade name: Dentatec
- Application of the substance / the preparation: Milling additive
- Details of the supplier of the safety data sheet:
  - Manufacturer/Supplier: SIRONA Dental Systems GmbH, Fabrikstraße 31, D-64625 Bensheim
  - http://www.sirona.de
  - Telefon: +49(0)6251/16-3440
  - Telefax: +49(0)6251/16-2935
  - Manufacturer: Graichen Produktions-und Vertriebs-GmbH, Darmstädterstraße 127-129, D-64625 Bensheim

- Informing department: Environment protection department
- Emergency telephone number:
  - Advice centre for poisoning university Mainz phone +49(0)6131/19240
  - or poison information: +49(0)700/GIFTINFO

2 Hazards identification

2.1 Classification according to Directive 67/548/EEC or Directive 1999/45/EC

- Xi: Irritant
- R36/38: Irritating to eyes and skin.
- Xi: Sensitising
- R43: May cause sensitisation by skin contact.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

2.2 Label elements

- Labelling according to EU guidelines: The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

- Code letter and hazard designation of product:
  - Xi Irritant

Hazard-determining components of labelling:
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Risk phrases:
- 36/38 Irritating to eyes and skin.
- 43 May cause sensitisation by skin contact.

Safety phrases:
- 24/25 Avoid contact with skin and eyes.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37 Wear suitable protective clothing and gloves.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 64 If swallowed, rinse mouth with water (only if the person is conscious).

2.3 Other hazards

- Results of PBT and vPoB assessment
  - PBT: Not applicable.

(Contd. on page 2)
3 Composition/information on ingredients

3.2 Chemical characterization: Mixtures

Description: Milling additive

Dangerous components:
- CAS: 52-51-7 bronopol (INN) < 2.5%
- CAS: 55965-84-9 mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) < 2.5%

4 First aid measures

4.1 Description of first aid measures

General information: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: Supply fresh air; consult doctor in case of symptoms.

After skin contact: If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

After swallowing: Rinse out mouth and then drink plenty of water. Instantly call for doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents: Water with a full water jet.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- Sulphur dioxide (SO2)
- Hydrogen chloride (HCl)
- Nitrogen oxides (NOx)
- Carbon monoxide (CO)
- Carbon dioxide (CO2)
- Hydrogen bromide (HBr)

5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use breathing protection against the effects of fumes/dust/aerosol.

6.2 Environmental precautions:

Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.
7 Handling and storage

7.1 Precautions for safe handling
No special precautions necessary if used correctly.

Information about protection against explosions and fires:
No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage
Requirements to be met by storerooms and containers:
Store only in the original container.

Information about storage in one single storage facility:
Store away from food.

Further information about storage conditions:
Store container in a well ventilated position.

7.3 Specific end use(s)
Milling additive

8 Exposure controls/personal protection

8.1 Control parameters
Components with critical values that require monitoring at the workplace:
56-81-5 glycerol
WEL Long-term value: 10 mg/m³

Additional Occupational Exposure Limit Values for possible hazards during processing:

<table>
<thead>
<tr>
<th>Country</th>
<th>Components</th>
<th>Categorie</th>
<th>Value Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>2-methyl-4-isothiazolin-3-on</td>
<td>MAK</td>
<td>0,05</td>
</tr>
<tr>
<td></td>
<td>5-chloro-2-methyl-4-isothiazolin-3-on</td>
<td>MAK</td>
<td>0,05</td>
</tr>
</tbody>
</table>

Additional information:
The lists that were valid during the compilation were used as basis.

8.2 Exposure controls
Personal protective equipment
General protective and hygienic measures
Keep away from foodstuffs, beverages and food.
Immediately remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

Breathing equipment:
Not required.

Protection of hands:
Protective gloves.

Material of gloves
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0,7 mm

Penetration time of glove material
Value for the permeation: Level ≥ 0,7 mm 480 min (8h)EN 374
The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Not suitable are gloves made of the following materials:
Natural rubber, NR
PVA gloves

Eye protection:
Tightly sealed safety glasses.
9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance: Fluid

Form: Fluid

Colour: Colourless

Smell: Characteristic

Odour threshold: Not determined.

pH-value at 20°C: > 4

Change in condition

Melting point/Melting range: Not determined

Boiling point/Boiling range: 100°C

Flash point: 101°C

Inflammability (solid, gaseous) Not applicable.

Ignition temperature: 400°C

Decomposition temperature: Not determined.

Self-inflammability: Product is not selfigniting.

Danger of explosion: Not determined.

Critical values for explosion:

Lower: Not determined.

Upper: Not determined.

Steam pressure at 20°C: 0.1 hPa

Density at 20°C: 1.23238 g/cm³

Relative density: Not determined.

Vapour density: Not determined.

Evaporation rate: Not determined.

Solubility in / Miscibility with Water: Fully miscible

Segregation coefficient (n-octanol/water): Not determined.

Viscosity:

dynamic: Not determined.

kinematic: Not determined.

9.2 Other information

No further relevant information available.

10 Stability and reactivity

10.1 Reactivity

No decomposition if used according to specifications.

10.2 Chemical stability

Forms explosive gas mixture with air

Reacts with strong oxidizing agents

No further relevant information available.

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

10.5 Incompatible materials:

10.6 Hazardous decomposition products:

Hydrogen chloride (HCl)

Nitrous vitriol gases

Sulphur dioxide

(Contd. on page 5)
**11 Toxicological information**

11.1 Information on toxicological effects

Acute toxicity:

1. LD/LC50 values that are relevant for classification:

Toxicological information (External MSDS)

2-Brom-2-nitropropan-1,3-diol: Acute toxicity, oral : 254 mg/kg rat.

LD50 values that are relevant for classification:

Acute toxicity, dermal : >1600 mg/kg

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Acute toxicity, oral : 457 mg/kg rat.

Acute toxicity, dermal : >2000 mg/kg rat.

Acute toxicity, dermal : 660 mg/kg rabbit.

Primary irritant effect:

on the skin: Irritant for skin and mucous membranes.

on the eye: irritant

Sensitization:

Sensitization possible by skin contact.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version: Irritant

**12 Ecological information**

12.1 Toxicity

Aquatic toxicity:

2-Brom-2-nitropropan-1,3-diol

Aquatic toxicity LC50: 96h: 41.2 mg/l Oncorhynchus mykiss

LC50: 96h: 35.7 mg/l Lepomis macrochirus

EC50: 48h: 1.4 mg/l Daphnia magna

EC50: 72h: 0.4 mg/l Pseudokirchneriella subcapitata

EC50: 16h: >50 mg/l Pseudomonas putida

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Aquatic toxicity LC50: 96h: 0.19 mg/l Oncorhynchus mykiss

LC50: 96h: 0.28 mg/l Lepomis macrochirus

EC50: 48h: 0.16 mg/l Daphnia magna

EC50: 72h: 0.018 mg/l Pseudokirchneriella subcapitata

EC50: 16h: 5.7 mg/l Pseudomonas putida

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 2 (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system.

12.5 Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

12.6 Other adverse effects

No further relevant information available.

**13 Disposal considerations**

13.1 Waste treatment methods

Recommenation:

Must be specially treated under adherence to official regulations.

Uncleaned packagings:

Recommendation:

Dispose of packaging according to regulations on the disposal of packagings.
* **14 Transport information**

- **14.1 UN-Number**
  - ADR, ADN, IATA: Void

- **14.2 UN proper shipping name**
  - ADR, ADN, IATA: Void

- **14.3 Transport hazard class(es)**
  - ADR, ADN, IATA: Void
  - Class: Void

- **14.4 Packing group**
  - ADR, IATA: Void

- **14.5 Environmental hazards:**
  - Marine pollutant: 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.

  **Transport/Additional information:**
  - Not dangerous according to the above specifications.

* **15 Regulatory information**

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

  **National regulations:**
  
<table>
<thead>
<tr>
<th>Class</th>
<th>Share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water 2,5-10</td>
<td></td>
</tr>
<tr>
<td>NK 50-100</td>
<td></td>
</tr>
</tbody>
</table>

  **Water hazard class:**
  - Water hazard class 2 (Self-assessment): hazardous for water.

- **15.2 Chemical safety assessment:**
  - A Chemical Safety Assessment has not been carried out.

* **16 Other information**

  **These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.**

  **Department issuing data specification sheet:**
  - Environment protection department.

  * Data compared to the previous version altered.
1 Identification

- **Product identifier**
  - **Trade name:** Dentatec
  - **Article number:** 5360-0421
  - **Application of the substance / the mixture** Grinding auxiliary product

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - **Supplier:** SIRONA Dental Systems GmbH
      - Fabrikstraße 31
      - D-64625 Bensheim
      - http://www.sirona.de
      - Telefon:+49(0)6251/16-1670
      - Telefax:+49(0)6251/16-1818
    - **Manufacturer:** Graichen Produktions-und Vertriebs-GmbH
      - Darmstädterstraße 127-129
      - D-64625 Bensheim
      - Germany
      - Tel.: +49 6251 73103
      - Fax: +49 6251 77901
      - E-Mail: ehs@graichen-bensheim.de
      - www.graichen.net
  - **Information department:** Environment protection department
  - **Emergency telephone number:** Advice centre for poisoning university Mainz phone +49(0)6131/19240
  - or poison information:+49(0)700/GIFTINFO

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - **Skin Sens.** 1 H317 May cause an allergic skin reaction.
  - **Aquatic Acute** 2 H401 Toxic to aquatic life.

- **Label elements**
  - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - GHS07
  - **Signal word** Warning
  - **Hazard-determining components of labeling:** mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1)
  - **Hazard statements** May cause an allergic skin reaction. Toxic to aquatic life.
  - **Precautionary statements**
    - Avoid breathing dust/fume/gas/mist/vapors/spray
    - Contaminated work clothing must not be allowed out of the workplace.
    - Avoid release to the environment.
    - Wear protective gloves.
    - If on skin: Wash with plenty of water.
    - Specific treatment (see on this label).
    - If skin irritation or rash occurs: Get medical advice/attention.
    - Wash contaminated clothing before reuse.
    - Dispose of contents/container in accordance with local/regional/national/international regulations.
  - **NFPA ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 1
    - Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 1
    - Reactivity = 0

- **Other hazards**
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
  - watery solution of salts, stabilizers and preservatives

- **Dangerous components:**
  - 56-81-5 glycerol
  - 50-100%
4 First-aid measures

- Description of first aid measures
  - General information: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: If skin irritation continues, consult a doctor.
  - After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
  - After swallowing: Rinse out mouth and then drink plenty of water. Immediately call a doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture
  - Formation of toxic gases is possible during heating or in case of fire.
    - Sulphur dioxide (SO2)
    - Hydrogen chloride (HCl)
    - Nitrogen oxides (NOx)
    - Carbon monoxide (CO)
- Advice for firefighters
  - Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
- Environmental precautions
- Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Ensure adequate ventilation.
- Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

7 Handling and storage

- Handling:
  - Precautions for safe handling: No special precautions are necessary if used correctly.
  - Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
    - Information about storage in one common storage facility: Store away from foodstuffs.
    - Further information about storage conditions: Store receptacle in a well ventilated area.
  - Specific end use(s): No further relevant information available.
Safety Data Sheet
acc. to OSHA HCS

Trade name: Dentatec

8 Exposure controls/personal protection

- Additional information about design of technical systems:
  No further data; see item 7.

- Control parameters
  - Components with limit values that require monitoring at the workplace:
    The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

56-81-5 glycerol

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Designation of material</th>
<th>%</th>
<th>Type</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>56-81-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>mist; **respirable fraction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- CAS No. Designation of material %
- Type Value Unit
  - Additional Occupational Exposure Limit Values for possible hazards during processing:
  - Country Components Categorie mg/m³
    - Germany 2-methyl-4-isothazolin-3-on MAK 0,05
    - 5-chloro-2-methyl-4-isothazolin-3-on MAK 0,05
  - Additional information:
    The lists that were valid during the creation were used as basis.

- Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
    - Breathing equipment: Not required.
    - Protection of hands: Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - Material of gloves
    - Nitrile rubber, NBR
    - Recommended thickness of the material: ≥ 0.7 mm
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
    - Penetration time of glove material
      - Value for the permeation: Level ≤ 0.7 mm 480 min (8h) EN374
    - The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
    - Not suitable are gloves made of the following materials:
      - Natural rubber, NR
      - PVA gloves
    - Eye protection: Tightly sealed goggles

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Fluid
      - Color: Colorless
    - Odor:
      - Odor threshold: Not determined.
      - pH-value at 20 °C (68 °F):
        - > 4
    - Change in condition
      - Boiling point/Boiling range: 100 °C (212 °F)
      - Flash point:
        - > 100 °C (>212 °F)
      - Flammability (solid, gaseous):
        - Not applicable.
      - Ignition temperature:
        - 400 °C (752 °F)
      - Decomposition temperature:
        - Not determined.
      - Auto igniting:
        - Product is not selfigniting.
Trade name: Dentatec

10 Stability and reactivity

- Reactivity
  - Chemical stability
  - No further relevant information available.
  - Possibility of hazardous reactions
    - No decomposition if used according to specifications.
    - Forms explosive gas mixture with air.
    - Reacts with strong oxidizing agents.
  - Conditions to avoid
    - No further relevant information available.
  - Incompatible materials
    - No further relevant information available.
  - Hazardous decomposition products
    - Hydrogen chloride (HCl)
    -Nitrogen oxides
    - Sulfur dioxide

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity
    - LD/LC50 values that are relevant for classification:
      56-81-5 glycerol
      - Oral LD50 12,600 mg/kg (rat)
      - Dermal LD50 >10,000 mg/kg (rabbit)
      52-51-7 bronopol (INN)
      - Oral LD50 307 mg/kg (rat)
      - Dermal LD50 >2,000 mg/kg (rat)
      - Inhalative LC50/4h 800 mg/l (rat)
      55965-84-9 mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1)
      - Oral LD50 550 mg/kg (rat)
      - Dermal LD50 200-1,000 mg/kg (rat)
      - Inhalative LC50/4h 0.31 mg/l (rat)

- Primary irritant effect
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: No irritating effect.
  - Sensitization: Sensitization possible through skin contact.

- Subacute to chronic toxicity:
  55965-84-9 mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1)
  - Oral NOAEL (subchronisch, 90d) <5 mg/kg (rat)
  - Dermal NOAEL (subchronisch, 28d) <3 mg/kg (rat)

- Additional toxicological information
  - The product shows the following dangers according to internally approved calculation methods for preparations:
    - Irritant

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    - None of the ingredients is listed.
  - NTP (National Toxicology Program)
    - None of the ingredients is listed.
**12 Ecological information**

- **Toxicity**
  - 56-81-5 glycerol
    - LC50 (24h) >5,000 mg/l (Carassius auratus)
    - IC50 (16h) >10,000 mg/l (scenedesmus quadricauda)
  - 52-51-7 bronopol (INN)
    - EC50 (48h) 1.4 mg/l (daphnia magnia/gr. Wasserfloh)
    - EC50 (72h) 0.4-2.8 mg/l (Algae)
    - LC50 (96h) 41.2 mg/l (Oncorhynchus mykiss)
  - 55965-84-9 mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
    - LC50 acute (96h) 0.58 mg/l (danio rerio/ Zebrabärbling)
    - EC50 (48h) 0.16 mg/l (daphnia magnia/gr. Wasserfloh)
    - EC50 (72h) 0.018 mg/l (Desmodesmus subsipicatus/Grünelge)
    - LC50 (96h) 0.19 mg/l (Oncorhynchus mykiss)
    - EC50 acute (21d) >1 mg/l (daphnia magnia/gr. Wasserfloh)
    - EC50 acute (48h) 1.02 mg/l (daphnia magnia/gr. Wasserfloh)
    - EC50 chron. (3h) 31.7 mg/l (Mikroorganismus)
    - LOEL chron. (34d) 1.6 mg/l (danio rerio/ Zebrabärbling)
    - NOEC chron. (34d) 0.5 mg/l (danio rerio/ Zebrabärbling)

- **Persistence and degradability**
  - 56-81-5 glycerol
    - CSB (chem. Sauerstoffbedarf) 95 % (---)
    - theor. O2 consumption (theor. Sauerstoffverbrauch) 1.217 g/g (---)
    - Biodegradability 14d 63 % (---) (Ready Biodegradability)

- **Behavior in environmental systems:**
  - 56-81-5 glycerol
    - Log Pow ≤ 4 (---)
  - 52-51-7 bronopol (INN)
    - Log Pow 0.17 (---)

- **Mobility in soil**
  - No further relevant information available.

- **Additional ecological information:**
  - General notes: Water hazard class 2 (Self-assessment): hazardous for water
  - Do not allow product to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.
  - Other adverse effects: No further relevant information available.

**13 Disposal considerations**

- **Waste treatment methods**
  - Recommendation: Must be specially treated adhering to official regulations.

- **Uncleaned packagings**
  - Recommendation: Dispose of packaging according to regulations on the disposal of packagings.

**14 Transport information**

- **UN-Number**
  - DOT, ADR, ADN, IMDG, IATA Void
  - UN proper shipping name Void

- **Transport hazard class(es)**
  - DOT, ADR, ADN, IMDG, IATA Void
  - Class Void
  - Packing group DOT, ADR, IMDG, IATA Void
Safety Data Sheet  
acc. to OSHA HCS

Trade name: Dentatec

- Environmental hazards:
  - Marine pollutant: No
- Special precautions for user
  - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.
- Transport/Additional information: Not dangerous according to the above specifications.
- UN "Model Regulation": Void

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances):
      None of the ingredients is listed.
  - Section 313 (Specific toxic chemical listings):
    - 52-51-7 bronopol (INN)
  - TSCA (Toxic Substances Control Act):
    - 56-81-5 glycerol
    - 52-51-7 bronopol (INN)
    - 7732-18-5 Wasser (water, Aqua)
  - Proposition 65
    - None of the ingredients is listed.
  - Chemicals known to cause cancer:
    - None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for females:
    - None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for males:
    - None of the ingredients is listed.
  - Chemicals known to cause developmental toxicity:
    - None of the ingredients is listed.
  - Carcinogenic categories
    - None of the ingredients is listed.
  - EPA (Environmental Protection Agency)
    - None of the ingredients is listed.
  - TLV (Threshold Limit Value established by ACGIH)
    - None of the ingredients is listed.
  - MAK (German Maximum Workplace Concentration)
    - None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    - None of the ingredients is listed.

- GHS label elements
  - The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
    - GHS07
  - Signal word
    - Warning
  - Hazard-determining components of labeling:
    - mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1)
  - Hazard statements
    - Toxic to aquatic life.
    - May cause an allergic skin reaction.
  - Precautionary statements
    - Avoid breathing dust/fume/gas/mist/vapors/spray
    - Contaminated work clothing must not be allowed out of the workplace.
    - Avoid release to the environment.
    - Wear protective gloves.
    - If on skin: Wash with plenty of water.
    - Specific treatment (see on this label).
    - If skin irritation or rash occurs: Get medical advice/attention.
    - Wash contaminated clothing before reuse.
    - Dispose of contents/container in accordance with local/regional/national/international regulations.

- Chemical safety assessment:
  - A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Environment protection department.
- Date of preparation / last revision 10/26/2017 / 1800

(Contd. on page 7)
Trade name: Dentatec

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  NIOSH: National Institute for Occupational Safety
  OSHA: Occupational Safety & Health
  TLV: Threshold Limit Value
  PEL: Permissible Exposure Limit
  REL: Recommended Exposure Limit
  Acute Tox. 3: Acute toxicity – Category 3
  Acute Tox. 4: Acute toxicity – Category 4
  Skin Corr. 1B: Skin corrosion/irritation – Category 1B
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  Skin Sens. 1: Skin sensitisation – Category 1
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
  Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2
  Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1