SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier:
Microcide SQ®

1.2. Relevant identified uses of the mixture and uses advised against:
Disinfectant/ biocide cleaner for professional use.

1.3. Details of the supplier of the safety data sheet:
Global Biotechnologies, Inc
19 Rigby Road
Scarborough, Maine 04074
Tel.: +1 207-883-0335

1.3.1. Responsible person: A. Robert Bogosian, Ph.D.
Telephone: +1 207-883-0335

1.4. Emergency telephone number: +1 207-233-8420

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the mixture:
Classification according to Regulation 1272/2008/EC (CLP):
Skin irritation 2 – H315
Serious eye damage 1 – H318

Warning H statements:
H315 – Causes skin irritation.
H318 – Causes serious eye damage.

2.2. Label elements:
Components which define the hazards: Tetrasodium ethylene diamine tetraacetate
Active ingredient content: Alkyldimethylethyl-benzylammonium-chloride (CAS: 85409-23-0) 1-< 5 %
Alkyldimethylbenzyl-ammoniumchloride (CAS: 68391-01-5) 1-< 5 %

IRRITANT

Warning H statements:
H315 – Causes skin irritation.
H318 – Causes serious eye damage.

Precautionary P statements:
P102 – Keep out of reach of children.
P280 – Wear protective gloves, eye protection/face protection.
P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 – Immediately call a POISON CENTER/doctor.
P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 – If skin irritation occurs: Get medical advice/attention.
P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards:
Global Biotechnologies, Inc
Ingestion of large quantities: Product is dangerous to health.
Results of PBT and vPvB assessment: no data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance:
Not applicable.

3.2. Mixture:

<table>
<thead>
<tr>
<th>Description</th>
<th>CAS number</th>
<th>EU number</th>
<th>REACH reg. nr.</th>
<th>Conc. (%)</th>
<th>Classification: 1272/2008/EC (CLP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrasodium ethylene diamine tetraacetate</td>
<td>64-02-8</td>
<td>200-573-9</td>
<td>-</td>
<td>1-5</td>
<td>GHS05 GHS07 Acute Tox. 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1 H302 H318</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>207-838-8</td>
<td>-</td>
<td>1-5</td>
<td>GHS07 Acute Tox. 4 Eye Irrit. 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkyldimethylethyl-benzylammonium-chloride*</td>
<td>85409-23-0</td>
<td>287-090-7</td>
<td>-</td>
<td>1-&lt;5</td>
<td>GHS07 Acute Tox. 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Corr 1B Aquatic Acute 1</td>
</tr>
<tr>
<td>Alkyldimethylbenzyl-ammoniumchloride*</td>
<td>68391-01-5</td>
<td>269-919-4</td>
<td>-</td>
<td>1-&lt;5</td>
<td>GHS07 Acute Tox. 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Corr 1B Aquatic Acute 1</td>
</tr>
</tbody>
</table>

*: Substance classified by the manufacturer or substance which has no obligatory classification according to the EU regulations.

For the full text of H phrases: see Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

IN CASE OF INGESTION:
Measures:
- Obtain immediate medical attention.
- Rinse the mouth thoroughly with water.
- Do not induce vomiting.
- Give copious water to drink.

IN CASE OF INHALATION:
Measures:
- Remove person from the danger area.
- Take the victim into fresh air.
- If necessary administer artificial respiration.
- In case of complaints, obtain medical help.
- Show the safety data sheet or the label.

IN CASE OF SKIN CONTACT:
Measures:
- Remove the contaminated clothes immediately.
- Wash the skin surface with plenty of water.
- In case of symptoms, obtain medical attention.

IN CASE OF EYE CONTACT:
Measures:
- In case of contact with eyes flush with water holding eyelids apart and moving the eyeballs (for several minutes).
- Obtain immediate medical attention and show him the label.

4.2. Most important symptoms and effects, both acute and delayed:
No data available.

4.3. Indication of any immediate medical attention and special treatment needed:
No data available.
SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media:
5.1.1. Suitable extinguishing media:
Product is non-combustible.
Choose extinguishing media depending on surrounding fire: water jet, dry chemical, carbon dioxide.

5.1.2. Unsuitable extinguishing media:
None known.

5.2. Special hazards arising from the substance or mixture:
In case of fire, oxides of carbon, oxides of nitrogen, hydrogen peroxide and other combustion products may be formed, the inhalation of such combustion products can have serious adverse effects on health.

5.3. Advise for fire fighters:
Wear full protective clothing and self-contained breathing apparatus.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:
6.1.1. For non-emergency personnel:
Keep unprotected people away, allow only well trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. For emergency responders:
Avoid contact with skin, and eyes.
Ensure adequate ventilation.
If applicable: caution; risk of slipping.

6.2. Environmental precautions:
Dispose the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

6.3. Methods and material for containment and cleaning up:
Collect the spilled product with absorbent (e.g. universal binder), then place into a suitable, closed, properly labelled chemical waste container for removal/disposal.

6.4. Reference to other sections:
For further and detailed information see section 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:
Observe conventional hygiene precautions.
See section 6.
Avoid aerosol formation.
Do not eat, drink or smoke during work.
Wash hands before breaks and at the end of work.
Follow all instructions on the label.
Technical measures:
No special measures required.
Precautions against fire and explosion:
No special measures required.

7.2. Conditions for safe storage, including any incompatibilities:
Technical measures and storage condition:
Do not store in gangways or stairwells.
Keep in original, closed and appropriately labelled container.
Protect from frost.
VCI storage class: 12
Incompatible materials: see section 10.
Packaging material: no special prescriptions.

7.3. Specific end use(s):
No specific instructions available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:
Occupational exposure limit values:
The components of the mixture are not regulated with exposure limit value.
8.2. Exposure controls:
In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

8.2.1 Appropriate engineering controls:
In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin.
Ensure adequate ventilation.
This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

8.2.2 Individual protection measures, such as personal protective equipment:
1. Eye/face protection: use appropriate tightly fitting protective glasses with side protection (EN 166).
2. Skin protection:
   a. Hand protection: use appropriate protective gloves (EN 374). Protective hand cream recommended. Final selection of glove material must be made taking the breakthrough times, permeation and degradation into account. The selection of the suitable gloves does not only depend on the material, but also on other quality characteristics and varies from manufacturer to manufacturer. For preparations the resistance of glove materials can not be predicted and must therefore be checked before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.
      Recommended material: rubber.
   b. Other: use appropriate protective clothes (for example safety shoes EN 344, long sleeved clothing).
3. Respiratory protection: normally not necessary.

8.2.3 Environmental exposure controls:
No specific prescription.
The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions an expert's advice should be sought out before deciding upon further protective measures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
9.1. Information on basic physical and chemical properties:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Appearance:</td>
<td>colourless liquid</td>
<td></td>
</tr>
<tr>
<td>2. Odour:</td>
<td>odourless</td>
<td></td>
</tr>
<tr>
<td>3. Odour threshold:</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>4. pH value:</td>
<td>~ 10</td>
<td>undiluted</td>
</tr>
<tr>
<td>5. Melting point/ freezing point:</td>
<td>&lt; 0 °C</td>
<td></td>
</tr>
<tr>
<td>6. Initial boiling point/boiling range:</td>
<td>&gt; 100 °C</td>
<td></td>
</tr>
<tr>
<td>7. Flash point:</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>8. Evaporation rate:</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>9. Flammability:</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>10. Upper/lower flammability or explosive limits:</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>11. Vapour pressure:</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>12. Vapour density:</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>13. Relative density:</td>
<td>1.007 g/ml</td>
<td></td>
</tr>
</tbody>
</table>

Global Biotechnologies, Inc
14. Solubility(ies): soluble in water
15. Partition coefficient: n-octanol/water: no data available
16. Self-ignition temperature: no data available
17. Degradation temperature: no data available
18. Viscosity: no data available
19. Explosive properties: no data available
20. Oxidizing properties: no data available

9.2. Other information:
No data available.

SECTION 10: STABILITY AND REACTIVITY
10.1. Reactivity:
None known.
10.2. Chemical stability:
Stable within normal temperature and general work conditions.
10.3. Possibility of hazardous reactions:
None known.
10.4. Conditions to avoid:
None known.
10.5. Incompatible materials:
See section 7.
Avoid contact with other chemicals.
10.6. Hazardous decomposition products:
See section 5.

SECTION 11: TOXICOLOGICAL INFORMATION
11.1. Information on toxicological effects:
Acute toxicity: none known.
Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes serious eye damage.
Respiratory or skin sensitisation: none known.
Germ cell mutagenicity: none known.
Carcinogenicity: none known.
Reproductive toxicity: none known.
STOT-single exposure: none known.
STOT-repeated exposure: none known.
Aspiration hazard: none known.
11.1.1. For substances subject to registration, brief summaries of the information derived from the test conducted:
No data available.
11.1.2. Relevant toxicological properties of the hazardous substances:
No data available.
11.1.3. Information on likely routes of exposure:
Ingestion, inhalation, skin contact, eye contact.
11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:
No data available.
11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:
Causes skin irritation.
Causes serious eye damage.
11.1.6. Interactive effects:
No data available.
11.1.7. Absence of specific data:
No information.
11.1.8. Other information:
The following symptoms may occur:
Irritation of the skin.
Ingestion of large quantities: Product is dangerous to health.
Danger of serious eye damage.

SECTION 12: ECOLOGICAL INFORMATION
12.1. **Toxicity:**
No data available.

12.2. **Persistence and degradability:**
- **Readily biodegradable:**
  - Alcohol, (C12-15) ethoxylate: 86%
  - Alkyl dimethyl: 79.9% / 28 days (US-EPA)

12.3. **Bioaccumulation potential:**
No data available.

12.4. **Mobility in soil:**
No data available.

12.5. **Results of PBT and vPvB assessment:**
No data available.

12.6. **Other adverse effects:**
- Water hazard class (Germany, self-assessment): 3

**SECTION 13: DISPOSAL CONSIDERATIONS**

13.1. **Waste treatment methods:**
Disposal according to the local regulations.

13.1.1. Information regarding the disposal of the product:
**Recommendation:**
Dispose according to the relevant regulations, in an approved landfill (e.g. incinerator).

**European Waste Code:**
- 07 06 01*: aqueous washing liquids and mother liquors
- 20 01 29*: detergents containing dangerous substances
  *: hazardous waste

13.1.2. Information regarding the disposal of the packaging:
Dispose according to the relevant regulations.
The contaminated packaging must be fully emptied. The emptied packaging can only be sent to recycling after proper cleaning. The uncleaned packaging has to be disposed in the same manner as the product.

13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:
None known.

13.1.4. Sewage disposal:
None known.

13.1.5. Special precautions for any recommended waste treatment:
No data available.

**SECTION 14: TRANSPORT INFORMATION**

Not dangerous good in sense of the transport regulations.

14.1. **UN Number:**
None.

14.2. **UN proper shipping name:**
None.

14.3. **Transport hazard class(es):**
None.

14.4. **Packaging group:**
None.

14.5. **Environmental hazard:**
No relevant information available.

14.6. **Special precautions for user:**
No relevant information available.

14.7. **Transport in bulk according to Annex II of MARPOL and the IBC Code:**
Not applicable.

**SECTION 15: REGULATORY INFORMATION**

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

15.2. Chemical safety assessment: no information available.

SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet:
The safety data sheet has been revised according to Regulation 2015/830/EU (Section 1-16).
The classification of the components and the mixture have been amended according to Regulation 1272/2008/EC (CLP) and its amendments.

Full text of the abbreviations in the safety data sheet:
DNEL: Derived no effect level. PNEC: Predicted no effect concentration. CMR effects: carcinogenity, mutagenicity and toxicity for reproduction. PBT: Persistent, bioaccumulative and toxic. vPvB: Very Persistent, Very Bioaccumulative. n.d.: not defined. n.a.: not applicable.

Data sources:
previous version of the safety data sheet (19.11.2013, version 2)

Methods used for the classification according to Regulation 1272/2008/EC:

<table>
<thead>
<tr>
<th>Skin irritation 2 – H315</th>
<th>Based on calculation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage 1 – H318</td>
<td>Based on calculation method</td>
</tr>
</tbody>
</table>

Relevant H-Phrases (number and full text) of Section 2 and 3:
H302 – Harmful if swallowed.
H312 – Harmful in contact with skin.
H314 – Causes severe skin burns and eye damage.
H315 – Causes skin irritation.
H318 – Causes serious eye damage.
H319 – Causes serious eye irritation.
H400 – Very toxic to aquatic life.

Training advice: no data available.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.
The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information. The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.
Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product. It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.