### 1 Identification

<table>
<thead>
<tr>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product identifier</strong></td>
</tr>
<tr>
<td><strong>Trade name:</strong> Sterilex Ultra Activator Solution</td>
</tr>
<tr>
<td><strong>Article number:</strong> No other identifiers</td>
</tr>
<tr>
<td><strong>Recommended use and restriction on use</strong></td>
</tr>
<tr>
<td><strong>Recommended use:</strong> Activator</td>
</tr>
<tr>
<td><strong>Restrictions on use:</strong> No relevant information available.</td>
</tr>
<tr>
<td><strong>Details of the supplier of the Safety Data Sheet</strong></td>
</tr>
<tr>
<td><strong>Manufacturer/Supplier:</strong></td>
</tr>
<tr>
<td>Sterilex Corporation</td>
</tr>
<tr>
<td>111 Lake Front Drive</td>
</tr>
<tr>
<td>Hunt Valley, MD 21030</td>
</tr>
<tr>
<td>Phone: 443-541-8800</td>
</tr>
<tr>
<td><strong>Emergency telephone number:</strong></td>
</tr>
<tr>
<td>ChemTel Inc.</td>
</tr>
<tr>
<td>(800)255-3924, +1 (813)248-0585</td>
</tr>
</tbody>
</table>

### 2 Hazard(s) identification

<table>
<thead>
<tr>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classification of the substance or mixture</strong></td>
</tr>
<tr>
<td>Skin Corr. 1C H314 Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td><strong>Label elements</strong></td>
</tr>
<tr>
<td><strong>GHS label elements</strong></td>
</tr>
<tr>
<td>The product is classified and labeled according to the Globally Harmonized System (GHS).</td>
</tr>
<tr>
<td><strong>Hazard pictograms:</strong></td>
</tr>
<tr>
<td><img src="image" alt="GHS05" /></td>
</tr>
<tr>
<td><strong>Signal word:</strong> Danger</td>
</tr>
<tr>
<td><strong>Hazard statements:</strong></td>
</tr>
<tr>
<td>H314 Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td><strong>Precautionary statements:</strong></td>
</tr>
<tr>
<td>P260  Do not breathe vapors.</td>
</tr>
<tr>
<td>P264  Wash thoroughly after handling.</td>
</tr>
<tr>
<td>P280  Wear protective gloves and eye protection.</td>
</tr>
<tr>
<td>P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</td>
</tr>
<tr>
<td>P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td>P310  Immediately call a POISON CENTER/doctor.</td>
</tr>
<tr>
<td>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</td>
</tr>
<tr>
<td>P363  Wash contaminated clothing before reuse.</td>
</tr>
<tr>
<td>P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.</td>
</tr>
<tr>
<td>P501  Dispose of contents/container in accordance with local/regional/national/international regulations.</td>
</tr>
</tbody>
</table>

(Cont'd. on page 2)
Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 05/25/2016
Revision: 05/25/2016

Trade name: Sterilex Ultra Activator Solution

(Cont’d. of page 1)

- Classification system
  - NFPA ratings (scale 0 - 4)
    - Health = 3
    - Fire = 0
    - Reactivity = 0
  - HMIS-ratings (scale 0 - 4)
    - Health = 3
    - Fire = 0
    - Reactivity = 0

- Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- Chemical characterization: Mixtures

- Components:

<table>
<thead>
<tr>
<th>Component ID</th>
<th>Component Name</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>497-19-8</td>
<td>sodium carbonate</td>
<td>4-8%</td>
</tr>
<tr>
<td></td>
<td>Eye Irrit. 2A, H319</td>
<td></td>
</tr>
<tr>
<td>584-08-7</td>
<td>potassium carbonate</td>
<td>4-8%</td>
</tr>
<tr>
<td></td>
<td>Skin Irrit. 2, H315, Eye Irrit. 2A, H319, STOT SE 3, H335</td>
<td></td>
</tr>
<tr>
<td>64-02-8</td>
<td>tetrasodium ethylenediaminetetraacetate</td>
<td>3-7%</td>
</tr>
<tr>
<td></td>
<td>Eye Dam. 1, H318</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 4, H302; Acute Tox. 4, H332</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information:
  For the wording of the listed Hazard Statements refer to section 16.
  For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

4 First-aid measures

- Description of first aid measures
  - After inhalation:
    Supply fresh air.
    Provide oxygen treatment if affected person has difficulty breathing.
    If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
  - After skin contact:
    Immediately remove any clothing soiled by the product.
    Immediately wash with water and soap and rinse thoroughly.
    Seek medical treatment in case of complaints.
    Launder contaminated clothing before re-use.
  - After eye contact:
    Remove contact lenses if worn.
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing:
    Rinse out mouth and then drink plenty of water.

(Cont’d. on page 3)
5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents:
    The product is not flammable.
    Use fire fighting measures that suit the environment.
  - For safety reasons unsuitable extinguishing agents: None.
- Special hazards arising from the substance or mixture
  Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
  - Protective equipment:
    Wear self-contained respiratory protective device.
    Wear fully protective suit.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures:
  Ensure adequate ventilation.
  Use personal protective equipment as required.
- Environmental precautions:
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Send for recovery or disposal in suitable receptacles.
- 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:
    Prevent formation of aerosols.
    Avoid splashes or spray in enclosed areas.
    Use only in well ventilated areas.
    Keep out of reach of children.
  - Information about protection against explosions and fires: No special measures required.
Trade name: Sterilex Ultra Activator Solution

- Conditions for safe storage, including any incompatibilities
  - Storage
    - Requirements to be met by storerooms and receptacles:
      Store in a well-ventilated place. Keep cool.
      Use only receptacles specifically permitted for this substance/product.
    - Information about storage in one common storage facility: Store away from foodstuffs.
    - Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
  - Specific end use(s): No relevant information available.

8 Exposure controls/personal protection

- Control parameters
  - Components with limit values that require monitoring at the workplace:
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      The usual precautionary measures for handling chemicals should be followed.
      Keep away from foodstuffs, beverages and feed.
      Wash hands before breaks and at the end of work.
      Avoid contact with the eyes and skin.
    - Engineering controls: No relevant information available.
    - Breathing equipment:
      Not required under normal conditions of use.
      For spills, respiratory protection may be advisable.
  - Protection of hands:
    [Image]
    Protective gloves
    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Material of gloves Rubber gloves
  - Eye protection:
    [Image]
    Safety glasses
  - Body protection: Protective work clothing
  - Limitation and supervision of exposure into the environment
    No relevant information available.
  - Risk management measures See Section 7 for additional information.
## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **Appearance:**
    - Form: Liquid
    - Color: Colorless
    - Odor: Odorless
    - Odor threshold: Not determined.
  - **pH-value:** 11-14
  - **Melting point/Melting range:** Not determined.
  - **Boiling point/Boiling range:** 100 °C (212 °F)
  - **Flash point:** Not applicable.
  - **Flammability (solid, gaseous):** Not applicable.
  - **Auto-ignition temperature:** Not determined.
  - **Decomposition temperature:** Not determined.
  - **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits**
  - Lower: Not determined.
  - Upper: Not determined.

- **Vapor pressure:** Not determined.

- **Density:** 1.15-1.2 g/cm³ (9.597-10.014 lbs/gal)
  - **Relative density:** Not determined.
  - **Vapor density:** Not determined.
  - **Evaporation rate:** Not determined.

- **Solubility in / Miscibility with**
  - **Water:** Fully miscible.

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

- **Viscosity**
  - **Dynamic:** Not determined.
  - **Kinematic:** Not determined.

- **Other information**
  - No relevant information available.

## 10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**
  No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions:**
  Exothermic reaction with acids.
  Toxic fumes may be released if heated above the decomposition point.
Trade name: Sterilex Ultra Activator Solution

- **Conditions to avoid:** Prevent from drying out.
- **Incompatible materials:** No relevant information available.
- **Hazardous decomposition products:**
  - Carbon monoxide and carbon dioxide
  - Nitrogen oxides (NOx)

### 11 Toxicological information

**Information on toxicological effects**

- **Acute toxicity:**
  
  **LD/LC50 values that are relevant for classification:**

<table>
<thead>
<tr>
<th>Compound</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-02-8 tetrakisodium ethylenediaminetetraacetate</td>
<td>Oral LD50</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - **On the skin:** Caustic effect on skin and mucous membranes.
  - **On the eye:** Strong irritant with the danger of severe eye injury.
  - **Sensitization:** No sensitizing effects known.

- **IARC (International Agency for Research on Cancer):**
  - None of the ingredients are listed.

- **NTP (National Toxicology Program):**
  - None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**
  - None of the ingredients are listed.

- **Probable route(s) of exposure:**
  - Skin contact.
  - Eye contact.
  - Ingestion.

- **Acute effects (acute toxicity, irritation and corrosivity):** Causes severe skin burns and eye damage.
- **Repeated dose toxicity:** No relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
  - **Carcinogenicity:** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity:** Based on available data, the classification criteria are not met.
  - **STOT-single exposure:** Based on available data, the classification criteria are not met.
  - **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
  - **Aspiration hazard:** Based on available data, the classification criteria are not met.

### 12 Ecological information

- **Toxicity**
  - **Aquatic toxicity** No relevant information available.
  - **Persistence and degradability** No relevant information available.
  - **Bioaccumulative potential:** No relevant information available.
Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 05/25/2016    Revision: 05/25/2016

Trade name: Sterilex Ultra Activator Solution

- Mobility in soil: No relevant information available.
- Ecotoxicological effects:
  - Remark: After neutralization a reduction of the harming action may be recognized
- Additional ecological information
  - General notes:
    Do not allow undiluted product or large quantities of it 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 relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
    The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- Uncleaned packagings
  - Recommendation: Disposal must be made according to official regulations.
  - Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- UN-Number
  - DOT, ADR, IMDG, IATA    UN3266
- UN proper shipping name
  - DOT, IATA    Corrosive liquid, basic, inorganic, n.o.s. (Potassium Carbonate, Sodium Carbonate)
  - ADR, IMDG    CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium Carbonate, Sodium Carbonate)
- Transport hazard class(es)
  - DOT
    - Class    8 Corrosive substances

(Cont’d. on page 8)
Trade name: Sterilex Ultra Activator Solution

- **Label** 8
- **ADR**
- **Class** 8 (C5) Corrosive substances
- **Label** 8
- **IMDG, IATA**
- **Class** 8 Corrosive substances
- **Label** 8
- **Packing group** III
- **DOT, ADR, IMDG, IATA**

**Environmental hazards**
- Marine pollutant: No

**Special precautions for user**
- Warning: Corrosive substances
- Danger code (Kemler): 80
- EMS Number: F-A,S-B
- Segregation groups Alkalis

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

---

15 **Regulatory information**

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - United States (USA)
    **CA DPR (California Department of Pesticide Regulation)**
    This chemical is registered as a pesticide product adjuvant by the California Department of Pesticide Regulation. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the adjuvant label:

    **DANGER**
    **CORROSIVE**
    Causes irreversible eye damage and skin burns. Harmful if swallowed. Harmful in contact with skin. Harmful by inhalation.

(Cont'd. on page 9)
### Trade name: Sterilex Ultra Activator Solution

<table>
<thead>
<tr>
<th><strong>SARA</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 355 (extremely hazardous substances):</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>Section 313 (Specific toxic chemical listings):</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>TSCA (Toxic Substances Control Act)</strong></td>
<td>All ingredients are listed.</td>
</tr>
<tr>
<td><strong>Proposition 65 (California)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Chemicals known to cause cancer:</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>Chemicals known to cause reproductive toxicity for females:</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>Chemicals known to cause reproductive toxicity for males:</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>Chemicals known to cause developmental toxicity:</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>Carcinogenic categories</strong></td>
<td></td>
</tr>
<tr>
<td><strong>EPA (Environmental Protection Agency):</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>IARC (International Agency for Research on Cancer):</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>NIOSH-Ca (National Institute for Occupational Safety and Health):</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>Canadian Domestic Substances List (DSL):</strong></td>
<td>All ingredients are listed.</td>
</tr>
</tbody>
</table>

**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.

**Date of preparation / last revision** 05/25/2016 / -

**Abbreviations and acronyms:**
- ADR: 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
- 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
Trade name: Sterilex Ultra Activator Solution

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>Acute Tox. 4</td>
<td>Acute toxicity – Category 4</td>
</tr>
<tr>
<td>Skin Corr. 1C</td>
<td>Skin corrosion/irritation – Category 1C</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation – Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation – Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation – Category 2A</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity (single exposure) – Category 3</td>
</tr>
</tbody>
</table>

**Sources**
- Website, European Chemicals Agency (echa.europa.eu)
- Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
- Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
- Safety Data Sheets, Individual Manufacturers
- SDS Prepared by: ChemTel Inc.
  - 1305 North Florida Avenue
  - Tampa, Florida USA 33602-2902
  - Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
  - Website: www.chemtelinc.com

(Cont’d. of page 9)