SAFETY DATA SHEET

Product name: CHLORHEXIDINE GLUCONATE SOLUTION USP, 20%
Last revised date: 11 May 2018

1. SUBSTANCE AND SUPPLIER IDENTIFICATION

PRODUCT NAME: Chlorhexidine Gluconate Solution USP 20%
DIN: 02053632

MANUFACTURER: Germiphene Corporation
ADDRESS: 1379 Colborne Street East, Brantford, Ontario N3T 5M1, Canada
PHONE: 519-759-7100
FAX: 519-759-1625

EMERGENCY PHONE: CANUTEC 613-996-6666

PRODUCT USE: Antimicrobial, disinfectant, preservative.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Undiluted concentrate product may cause serious eye damage, may damage ears if contact is made with inner ear.

SYMBOLS:

GHS Classification:

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Environmental</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Damage:</td>
<td>Category 1</td>
<td></td>
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<tr>
<td>Skin Irritant:</td>
<td>Category 3</td>
<td></td>
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<tr>
<td>Specific Organ Toxicity: (Respiratory irritation)</td>
<td>Category 3</td>
<td></td>
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<tr>
<td>Oral Toxicity:</td>
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<td>Category 4</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Hazard Statements</th>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>H320: Causes serious eye damage</td>
<td>P261: Avoid breathing vapors</td>
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<tr>
<td>H316: May cause mild skin irritation</td>
<td>P264: Wash hands thoroughly after handling</td>
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<tr>
<td>H335: May cause respiratory irritation</td>
<td>P271: Use only outdoors or in a well-ventilated area</td>
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<td></td>
<td>P280: Wear appropriate protective gloves/eye protection</td>
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<td>P270: Do not eat, drink, or smoke when using this product.</td>
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<td>P304+P340: If inhaled: remove person to fresh air and keep comfortable for breathing.</td>
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<td>P312: Call a poison center/doctor if you feel unwell.</td>
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<tr>
<td>H302: Harmful if swallowed.</td>
<td>P310: Immediately call a poison center/doctor.</td>
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<tr>
<td></td>
<td>P301+P312: If swallowed: call a poison center/doctor if you feel unwell.</td>
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<tr>
<td></td>
<td>P330: Rinse mouth.</td>
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<tr>
<td></td>
<td>P403+P233: Store in a well-ventilated place. Keep container tightly closed.</td>
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<tr>
<td></td>
<td>P405: Store locked up.</td>
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<tr>
<td></td>
<td>P501: Dispose of contents/container in accordance with local/regional/national/ international regulations.</td>
</tr>
</tbody>
</table>
2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT: Chlorhexidine Gluconate  
CAS No 18472-51-0  
% wt 20  
HAZARDOUS: yes

4. FIRST AID MEASURES

EYES: With eye held open, thoroughly rinse immediately with plenty of water for at least 15 minutes. Immediately seek medical attention (key term: caustic eye burn).

SKIN: Wash skin with large amounts of running water, and soap if available, for at least 15 minutes. If irritation persists, get medical attention.

INGESTION: If ingested, rinse mouth. Do not induce vomiting, get medical attention if unwell. If vomiting occurs, give fluids again. Have physician determine if patient’s condition allows for induction of vomiting or evacuation of the stomach. Do not give anything by mouth to a convulsing or unconscious person.

INHALATION: In case of inhalation, remove to fresh air. Rest in a position comfortable for breathing. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Notes to physician
The initial focus is only on the local action, characterized by quickly progressing deep tissue damage. Coughing is a symptom of a respiratory tract irritation after inhalation of aerosols or mists from caustic liquids.

In the eye, caustic liquids cause, depending on the intensity of exposure, severe irritation, destruction, and ablation of the epithelium of the conjunctiva and cornea, corneal clouding, edema and ulcerations. Danger! Possible loss of eyesight!

Superficial irritations and damage up to ulcerations and scarring develop on the skin.

5. FIREFIGHTING MEASURES

FLAMMABILITY: No  
COMBUSTIBLE: No  
HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon and nitrogen, hydrogen chloride, carbon monoxide, carbon dioxide, organic products of decomposition, flammable smouldering gases nitrogen oxides (NOx)  
MEANS OF EXTINCTION: Carbon dioxide, dry chemical foam, water spray, dry powder, mist. Do not use a solid water stream as it may scatter and spread fire.

6. ACCIDENTAL RELEASE MEASURES

CAUTION! Floor may become slippery. For small quantities (less than 4 L), wipe up spill and rinse with water. For large quantities, dike and contain spill with inert material (sand, earth, etc.) and transfer liquid and solid separately to containers for recovery or disposal. Prevent runoff into drains, sewers, and other waterways. Absorb on sawdust and incinerate.
7. HANDLING AND STORAGE

The product should only be handled by trained personnel. Avoid contact with eyes and ears. Handle with care. Avoid breathing vapours. It is advisable that gloves and goggles be worn when handling the concentrate. Wash thoroughly after handling.

To maintain product quality, do not store in heat or direct sunlight. Keep container closed when not in use. Store in airtight containers away from light and at temperature below 25°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE PROTECTION: Wear safety goggles with side shields.
SKIN PROTECTION: Rubber or neoprene gloves and usual lab protective clothing. A safety shower and eye wash fountain should be readily available.
VENTILATION: Provide adequate ventilation.
RESPIRATORY PROTECTION: Use suitable respiratory protection where aerosols/vapours are generated.

HYGIENE MEASURES: Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work. Take off contaminated clothing and wash before reuse. Preventative skin protection is recommended. Use barrier cream regularly.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colourless to pale straw-coloured
ODOUR: Almost odourless
PHYSICAL STATE: Liquid
pH: 5.5 – 7.0
BOILING POINT: N/Av
MELTING POINT: N/Av
FREEZING POINT: N/Av
EVAPORATION RATE: N/Av
VAPOUR PRESSURE (mmHg): N/Av
SPECIFIC GRAVITY: 1.06 – 1.07
SOLUBILITY: Miscible with water. Soluble in acetone and in alcohol.

10. STABILITY AND REACTIVITY

STABILITY: Stable at normal conditions.
CONDITIONS TO AVOID: Exposure to sunlight and frost.
INCOMPATABILITY (MATERIALS TO AVOID): None
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and oxygen.
11.  TOXICOLOGICAL INFORMATION

CHLORHEXIDINE GLUCONATE 20% Solution

Product Acute oral toxicity  
LD50 Rat (male): 2270 mg/kg

Product Acute dermal toxicity  
LD50 Rabbit: > 5000 mg/kg

Product skin irritation  
No data available

Product eye irritation  
Rabbit
Risk of serious damage to eyes

Product sensitization  
Maximization test guinea pig: does not cause skin sensitisation

Product Repeated dose toxicity:
Oral rat (male/female) 0, 5, 25, or 40 mg/kg body weight/day / 2 years
Number of exposures: continuous
LOAEL: 8.88 mg/kg

Dermal monkey (male/female) / 13 weeks
Number of exposures: once, 7 days a week
No therapy-related results

Literature

12.  ECOLOGICAL INFORMATION

N/Av

13.  DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose in accordance with municipal, provincial and federal regulations.

14.  TRANSPORT INFORMATION

Not regulated by TDG.

15.  REGULATORY INFORMATION

WHMIS CATEGORY: D2B severe eye irritant

16.  OTHER INFORMATION

Prepared by: Germiphene Technical Department

Disclaimer

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