



MATERIAL SAFETY DATA SHEET CHEM-SAN

Revision Number 4a, Revision Date 14.01.10

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Code FAB114BT
Product Name CHEM-SAN

Synonyms Quaternary Ammonium Sanitizer

Manufacturer and Supplier CHEM CLEAN LTD
#1 Trincity Drive
Trincity Industrial Estate
Trincity
Trinidad and Tobago

EMERGENCY TELEPHONE NUMBER (868) 223 2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS | CHEMICAL NAME | % WEIGHT |
|------------|---|----------|
| 68391-01-5 | n-Alkyl Dimethyl Benzyl Ammonium Chloride | 5.0 min |
| 68956-79-6 | n-Alkyl Dimethyl Ethyl Benzyl Ammonium Chloride | 5.0 min |

3. HAZARDS IDENTIFICATION

Emergency Overview:

- ◆ Irritant
- ◆ Based upon available toxicity information for this and closely related materials, it is anticipated that this material will be harmful if swallowed

| | |
|------------------------------|---|
| Eye Contact | ◆ Can causes eye irritation |
| Skin Contact | ◆ Prolonged contact with concentrate can cause irritation |
| Inhalation | |
| Ingestion | ◆ Harmful if swallowed |
| General Advice | ◆ See First Aid Section |
| Properties affecting Health | ◆ Pre-existing skin or respiratory disorders |
| Principle Routes of Exposure | ◆ Eye ◆ Inhalation ◆ Skin |

4. FIRST AID MEASURES

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|-------------------------------|---|
| General Advice | <ul style="list-style-type: none"> ◆ Show this Safety Data Sheet to the Doctor in attendance |
| Skin Contact | <ul style="list-style-type: none"> ◆ Immediately remove contaminated clothing and wash before reuse ◆ Immediately flush skin with plenty of cool running water for at least 15 minutes ◆ Immediate Medical Attention is required if irritation persists or burns develop |
| Eye Contact | <ul style="list-style-type: none"> ◆ In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes ◆ Keep eyes wide open while rinsing ◆ Immediate medical attention is required |
| Inhalation | <ul style="list-style-type: none"> ◆ If affected, move to fresh air |
| Ingestion | <ul style="list-style-type: none"> ◆ If swallowed, immediately drink a large quantity of raw egg, milk or milk of magnesia then drink 3-4 glasses of water ◆ Do not induce vomiting ◆ Rinse mouth thoroughly ◆ Never give anything by mouth to an unconscious person ◆ Immediate medical attention is required |
| Aggravated Medical Conditions | <ul style="list-style-type: none"> ◆ Pre-existing skin or respiratory disorders |

5. FIRE-FIGHTING MEASURES

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|---|--|
| Flash Point | <ul style="list-style-type: none"> ◆ N/A |
| Suitable Extinguishing Media | <ul style="list-style-type: none"> ◆ Water – spray ◆ As appropriate for surrounding fire – product will not burn |
| Extinguishing media which must not be used for safety reasons | <ul style="list-style-type: none"> ◆ N/A |
| Specific Hazards | <ul style="list-style-type: none"> ◆ Cool exposed containers with water spray to prevent pressure build-up ◆ Must wear NIOSH approved self-contained breathing apparatus and protective clothing |
| Special exposure hazards arising from the substance, or preparation itself, its combustion products or released gases | <ul style="list-style-type: none"> ◆ N/A |
| Special Protective Equipment for fire-fighters | <ul style="list-style-type: none"> ◆ As in any fire, wear NIOSH approved self-contained breathing apparatus and full protective gear |
| Specific Methods | <ul style="list-style-type: none"> ◆ Cool containers / Tanks with water spray ◆ Fire residues and contaminated fire extinguishing |

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| | water must be disposed of in accordance with local regulations |
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6. ACCIDENTAL RELEASE MEASURES

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|---------------------------|--|
| Personal Precautions | <ul style="list-style-type: none"> ◆ Do not inhale mist, do not get in eyes or skin, do not swallow |
| Environmental Precautions | <ul style="list-style-type: none"> ◆ Dilute and neutralize waste very carefully and discharge in accordance with Government Regulations |
| Methods for cleaning up | <ul style="list-style-type: none"> ◆ Small spills: Wash down with large quantities of water in sanitary sewer ◆ Large spills: Dike to prevent runoff. Reclaim as much as possible. Absorb remainder with inert material (sand or vermiculite) and place in compatible container for disposal. Flush residue with large amounts of water into sanitary sewer. |

7. HANDLING AND STORAGE

Handling

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|--------------------------------|--|
| Technical Measures/Precautions | <ul style="list-style-type: none"> ◆ Avoid contact with skin, eyes ◆ Protect eyes and skin when handling concentrate |
| Safe Handling Advice | <ul style="list-style-type: none"> ◆ Wash hands immediately after contact to avoid hand-eye transfer |
| | ◆ |

Storage

| | |
|--------------------------------|---|
| Technical Measures/Precautions | <ul style="list-style-type: none"> ◆ Keep containers tightly closed in a cool, dry area ◆ Keep container closed when not in use ◆ Store only in original properly labeled container ◆ Do not reuse empty containers – they may contain residues ◆ Do not mix with anything but water ◆ Do not contaminate water, food or feed |
| Incompatible Products | <ul style="list-style-type: none"> ◆ None determined |
| Specific use(s) | <ul style="list-style-type: none"> ◆ Sanitizer |

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

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|--------------------------------------|--|
| Engineering Measures | <ul style="list-style-type: none"> ◆ The use of local exhaust ventilation is recommended. |
| <u>Personal Protective Equipment</u> | |
| Hand Protection | <ul style="list-style-type: none"> ◆ Neoprene or rubber gloves |
| Eye Protection | <ul style="list-style-type: none"> ◆ Tightly fitting chemical splash goggles ◆ Safety eyebath nearby |
| Respiratory Protection | <ul style="list-style-type: none"> ◆ None normally required ◆ In case of insufficient ventilation, wear NIOSH approved respiratory equipment |

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|---------------------------------|---|
| Skin and Body Protection | <ul style="list-style-type: none"> ◆ Use chemical protective clothing for repeated or prolonged contact ◆ Coveralls, apron, gloves, rubber boots should be worn |
| Hygiene Measures | <ul style="list-style-type: none"> ◆ Keep away from food, drink and feed ◆ When using, do not eat, drink or smoke ◆ Regular cleaning of equipment, work area and clothing ◆ Wear suitable gloves and eye/face protection ◆ For environmental protection, remove and wash all contaminated protective equipment before re-use |
| Environmental Exposure Controls | |

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

| | |
|----------------|--------------|
| Physical State | Clear Liquid |
| Color | Colorless |
| Odor | |

Important Health Safety and Environmental Information

| | |
|--|---------------|
| Molecular Wt. | N/A |
| pH | 8.30 - 8.50 |
| Boiling pt | N/A |
| Specific gravity | 0.99-1.01 |
| Viscosity (CSTS) | Not specified |
| Solubility in water | 100% |
| Vapor Pressure | N/A |
| Vapor Density (AIR=1) | N/A |
| Evaporation Rate (WATER:1) | N/A |
| Freezing Point | N/A |
| Volatile Organic Compounds (Total VOC's) | N/A |

10. STABILITY AND REACTIVITY

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|----------------------------------|----------------------------------|
| Stability | ◆ Stable under normal conditions |
| Conditions to avoid | ◆ None |
| Materials to avoid | ◆ N/A |
| Hazardous Decomposition Products | ◆ N/A |
| Polymerization | ◆ Will not occur |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Product Information

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|-----------------|--|
| LD50/oral/rat | |
| Local effects | |
| Skin irritation | ◆ Prolonged contact may cause irritation |

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|-------------------------|----------------------------|
| Eye irritation | ◆ Can cause eye irritation |
| Sensitization | ◆ Skin sensitizer |
| <u>Specific effects</u> | |
| Carcinogenic Effects | ◆ None |
| Mutagenic Effects | ◆ Not determined |
| Reproductive toxicity | ◆ Not determined |
| Target Organ Effects | ◆ Not determined |

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Component Information

| CAS | Chemical Name | % Weight |
|-----|---------------|----------|
| N/A | N/A | N/A |

Product information

Aquatic Toxicity: Do not discharge into lakes, streams, ponds or public waterways unless in accordance with Government Regulations.

Other Information

13. DISPOSAL CONSIDERATIONS

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|-------------------------------------|--|
| Waste from residues/Unused products | Do not discharge into lakes, streams, ponds or public waterways unless in accordance with Government Regulations. Consult the Environmental Protection Agency before disposing of any chemicals. Refer to the Environmental Management Authority (EMA) for complete waste disposal regulations |
| Contaminated Packaging | Empty containers should be taken for recycling, recovery or waste disposal. Do not reuse empty containers |
| Further Information | |

14. TRANSPORT INFORMATION

N/A

15. REGULATORY INFORMATION

N/A

16. OTHER INFORMATION

Literary Reference

Sanitizing Product

Other

The information in the Material Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, we assume no liability resulting from use of MSDS information.

End of Safety data sheet