

Safety Data Sheet

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| Issue No: 3.5 | Issue date: April 2024 | Issued by ICA International Chemicals |
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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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| Identification of product: | SaniWash |
| Other means of identification: | Didecyldimethyl Ammonium Chloride (DDAC) 6% Gluteraldehyde 7% |
| Recommended Use: | A broad-spectrum concentrated disinfectant and washing agent to kill micro-organisms such as fungi, bacteria and yeast. |
| Restrictions on use: | Not to be inhaled or for internal use. |
| Supplier: | ICA International Chemicals (Pty) Ltd |
| Address: | 28 Planken Street Plankenbrug Industrial STELLENBOSCH · 7600 · SOUTH AFRICA |
| Telephone No.: | +27-21 886 9812 |
| Fax No: | +27-21 886 8209 |
| Emergency Tel No.: | Griffon Poison Information Centre: +27-82 446 8946 Human Poison Helpline: +27-861 555 777 |

2. HAZARDS IDENTIFICATION

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| GHS classification of Product (liquid) | Acute Toxicity (oral) – Category 4 Acute Toxicity (inhalation) – Category 3 (Product is a liquid, no vapours and mist will be generated with general handling and transport) Skin Irritation – Category 2 Respiratory sensitization – Category 1 Skin sensitization– Category 1A Acute Aquatic Toxicity – Category 2 Chronic Aquatic Toxicity – Category 2 |
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Label Elements

Classification and Labelling of Chemicals (GHS) Rev 10, 2023; Regulation EC No. 1272/2008 [EU-GHS/CLP]



Signal Word

DANGER

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|----------------------------------|------|---|
| Hazard Statements | H302 | Harmful if swallowed |
| | H315 | Causes skin irritation |
| | H317 | May cause an allergic skin reaction |
| | H331 | Toxic if inhaled |
| | H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| | H401 | Toxic to aquatic life |
| | H411 | Toxic to aquatic life with long lasting effects |
| General Precautionary Statements | P101 | If medical advice is needed: Have product container or label at hand. |
| | P102 | Keep out of reach of children, uninformed persons and animals. |
| | P103 | Read label carefully and follow all instructions. |

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| Prevention Precautionary Statements | P233 | Keep container tightly closed. |
| | P261 | Avoid breathing mist, vapours and spray. |
| | P264 | Wash hands thoroughly after handling. |
| | P270 | Do not eat, drink or smoke when using this product. |
| | P271 | Use only outdoors or in a well-ventilated area. |
| | P272 | Contaminated work clothing should not be allowed out of the workplace. |
| | P273 | Avoid release to the environment |
| | P280 | Wear protective gloves, protective clothing, eye and face protection. |
| | P284 | In case of inadequate ventilation, wear respiratory protection |
| Response Precautionary Statements | P301 + P317 | IF SWALLOWED: Get medical help. |
| | P302 + P352 | IF ON SKIN: wash with plenty of water. |
| | P304 + P340 | IF (undiluted mist): INHALED remove to fresh air and keep at rest in a position comfortable for breathing. |
| | P304 + P316 | IF INHALED: Get emergency medical help immediately. |
| | P321 | For specific treatment refer to first aid measures on this document. |
| | P332 + P317 | If skin irritation occurs: Get medical help. |
| | P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| Storage Precautionary Statements | P391 | Collect spillage. |
| | P403 + P233 | Store in a well-ventilated place and keep the container tightly close. |
| | P405 | Store locked up. |
| Disposal Precautionary Statements | P501 | Dispose of container and contents in accordance with local and national regulations. |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| INGREDIENT(S) | CAS NO: | CONCENTRATION % (w/v) | CLASSIFICATION EC1272/2008 |
|---|------------|--------------------------|--|
| N,N-Didecyl-N,N-dimethyl ammonium chloride (DDAC) | 7173-51-5 | 6 | Acute Oral Toxicity Category, 4 H302; Skin Corrosion Category 1B, H314 |
| Glutaraldehyde | 111-30-8 | 7 | Acute Oral Toxicity Category 3, H301, Skin Corrosion Category 1B, H314, Skin Sensitization Category 1A, H317, Acute Inhalation Toxicity Category 2, H330, STOT SE Category 3, H335, Respiratory Sensitization Category 1, H334, Aquatic Acute Category 1, H400, Aquatic Chronic Category 2, H411 |
| Cocamidopropyl Hydroxysultaine | 68139-30-0 | 1 – 10 | Eye Irritation Category 2, H319, Aquatic Acute Category 1, H400, Aquatic Chronic Category 2, H411 |
| Isotridecanol, ethoxylated | 69011-36-5 | 1 – 10 | Aquatic Acute Category 1, H400, Aquatic Chronic Category 3, H412 |

There are no additional ingredients present which, within the current knowledge of the provider of this SDS, and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. See section 16 for legend of additional H-phrases not in section 2.

4. FIRST AID MEASURES

Show this MATERIAL SAFETY DATA SHEET to a doctor.

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| INHALATION: | If experiencing respiratory symptoms (irritation, difficulty with breathing), remove person to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Call for medical assistance. |
| SKIN CONTACT: | If on skin and irritation occur, rinse affected area immediately with plenty of water/shower. Wash contaminated clothing before re-use. Seek medical assistance if skin irritation persists. |
| EYE CONTACT: | Rinse eyes IMMEDIATELY with clean water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing while holding eyelids apart. Immediately seek medical assistance. |
| INGESTION: | If swallowed rinse mouth thoroughly with water. Immediately give 3-4 glasses water. If vomiting does occur, keep on giving fluids. Get medical attention. Possible mucosal damage may contra-indicate the use of gastric lavage if swallowed. DO NOT induce vomiting. At all costs , make every effort to prevent vomit from entering the lungs by careful placement of the patient. Never give anything to an unconscious person. |

5. FIRE FIGHTING MEASURES

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| SUITABLE EXTINGUISHING MEDIA: | Small fires: Dry chemical powder, carbon dioxide (CO ₂), water spray or alcohol-resistant foam |
| FIRE INVOLVING TANKS: | Large fires: Water spray, fog, or alcohol-resistant foam Cool containers with flooding quantities of water until well after fire is out. DO NOT get water inside containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. |
| UNSUITABLE EXTINGUISHING MEDIA: | DO NOT use high volume water jet, due to contamination risk. |
| SPECIFIC EXTINGUISHING METHODS: | Fight fire from maximum distance. For massive fire, use unmanned hose holder or monitor nozzles. Collect contaminated extinguishing water separately; do not allow contaminated water to reach the sewage or effluent systems. |
| SPECIFIC HAZARDS ARISING FROM COMBUSTION PRODUCTS: | In case of fire, the formation of very toxic fumes of /nitrogen oxides, ammonia, and hydrogen chloride can be expected. |
| PRECAUTIONS FOR FIRE FIGHTERS: | Fire fighters should wear full protective gear including self-contained breathing apparatus (SCBA). Fight fire from safe distance. Contact with the fumes and vapours should be avoided by staying upwind. Clean all clothing before reuse. Severely contaminated clothing cannot be adequately decontaminated and must be disposed as a hazardous waste. Shower with soap and water after contact with chemical product. |
| FURTHER INFORMATION: | <ul style="list-style-type: none"> • If possible, safely move undamaged intact containers away from the area around the fire. • Keep containers cool by spraying with water if exposed to fire. • Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. • In case of fire and/or explosion do not breathe fumes. |

6. ACCIDENTAL RELEASE MEASURES

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| SPILL OR LEAK: | |
| PERSONAL PRECAUTIONS: | Avoid contact with skin and eyes. Do not touch or walk through spilled material. Do not inhale spray or fumes. |
| PROTECTIVE EQUIPMENT: | Wear personal protective clothing and equipment (see section 8). <ul style="list-style-type: none"> • EYES: Wear chemical safety glasses. • RESPIRATORY: If inhalation of vapour/mist is likely to occur, wear an approved respirator mask with mist filter, especially in case of insufficient ventilation. • SKIN: Wear washable hat and buttoned-up cotton overalls. |
| EMERGENCY PROCEDURES: | <ul style="list-style-type: none"> • Stop leak if safe to do so. • Avoid inhalation and contact with spilled material or contaminated surfaces. • PREVENT spilled material from entering drains or sewer systems. Dike and bund area with sand or earth to prevent contamination of drains or sewers. • Cover the drains. • Ensure adequate ventilation. • Keep people away from and upwind of spill/leak. • Avoid inhalation and contact with spilled material or contaminated surfaces. • DO NOT eat, drink or smoke. • PREVENT spilled material from entering waterway and sewer systems, basements, and confined areas. If the product contaminates rivers and lakes or waterways immediately inform respective authorities. |
| ENVIRONMENTAL PRECAUTIONS: | |
| METHODS AND MATERIALS FOR CONTAINMENT: | <ul style="list-style-type: none"> • Contain and absorb liquid spills with inert material, remove by scoop or vacuum. Use approved industrial vacuum cleaner for removal and place in clearly marked waste containers. |
| METHODS AND MATERIALS FOR CLEANING UP: | <ul style="list-style-type: none"> • Dilute spilled product with at least 1000 times water. • For small spill, contain with sand or vermiculate and dilute the contained product. • For large spill, contain the spill and evacuate the area, leave until the reaction subsides, then collect up for disposal. • Transfer contaminated material to a container and remove to a safe place for disposal. • Very dilute solution can be washed into drains with plenty of water. Contact the proper local authorities in the case of large spills. • Prevent undiluted product from entering drains. Should not be released undiluted into the environment. • This product may be harmful to fish when exposed to undiluted. |

SECONDARY DISASTER PREVENTION MEASURES: NA

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:

- Suitable Technical Measures
- Suitable Precautions
- Prevention of contact

- Always store products in their original containers, which include the label listing ingredients, directions for use, and first aid steps in case of accidental poisoning.
- Use in well-ventilated area and AVOID inhalation of spray mist. Wear suitable respiratory equipment.
- Never transfer to soft drink bottles or other containers. Children or others may mistake them for something to eat or drink.
- Eating, drinking and smoking in work area prohibited. Prevent fire and explosions in working area.
- Wear suitable protective clothing which includes chemical-resistant overalls, footwear, socks, dust mask, eye shields and gloves.
- Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Wash hands, arms, and face after application. Wash gloves and contaminated protective clothing daily before reuse.

CONDITIONS FOR SAFE STORAGE:

- Suitable Technical Measures
- Separation measures from incompatible substances and mixtures

- Keep out of reach of unauthorized persons, children, and animals. Always store products in their original containers, which include the label listing ingredients, in a cool, dry, and well-ventilated area out of direct sunlight.
- Segregate from foods and animal feeds.
- DO NOT reuse the container for any other purpose.

PACKAGING MATERIAL

Plastic containers

FIRE PRECAUTIONS:

Store in a well-ventilated area.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

ADI – Acceptable Daily Intake

DDAC = 0,1 mg kg⁻¹ bw day⁻¹ (EFSA)

Glutaraldehyde = Not allocated

AOEL – Accepted Operator Exposure Level

Not allocated

NATIONAL EXPOSURE STANDARDS:

Not available

BIOLOGICAL LIMIT VALUES:

Not available

ENGINEERING CONTROLS:

Handle in well-ventilated areas, generally natural ventilation is adequate. When airborne mist/vapours are generated use local exhaust ventilation controls. Facilities should be equipped with an eyewash station and a safety shower. Where necessary, seek additional occupational hygiene advice.

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection: Where exposure through inhalation may occur when handling and/or when preparing the spray mixture, wear a face mask. If the product is used in confined spaces a respirator suitable for protection from mists of product is adequate.

Hand Protection: Wear chemical-resistant gloves made of any waterproof material such as nitrile rubber. Glove thickness: 0.5 mm

Eye Protection: The use of safety goggles (full-face shield) is recommended.

Skin and Body Protection: Wear suitable protective clothing which includes chemical-resistant overalls, footwear, socks, dust mask, eye shields and gloves. Remove and wash contaminated protective clothing daily.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:

Liquid

COLOUR:

Clear, colourless foaming liquid

ODOUR:

Slight bitter smell. Bitter taste.

MELTING POINT / FREEZING POINT °C:

Not available

BOILING POINT:

Not available

DECOMPOSITION TEMPERATURE (a.i):

DDAC: 280 °C

Glutaraldehyde: 87 – 189 °C

FLAMMABILITY:

Not flammable

EXPLOSIVE LIMITS:

Not applicable

FLASH POINT:

None

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| AUTO-IGNITION TEMPERATURE: | Will not auto Ignite |
| pH (1% IN WATER): | 3.0 – 5.0 |
| KINEMATIC VISCOSITY: | Not available |
| Kinematic viscosity = $\frac{\text{Dynamic viscosity (mPa/s)}}{\text{Density (g/cm}^3\text{)}}$ | |
| VISCOSITY: | Not available |
| DENSITY / RELATIVE DENSITY: | ~ 1,02 kg/ℓ (0.95 – 1.03 kg/ℓ) at 20 °C (IP 365) |
| SOLUBILITY IN WATER (a.i): | Freely soluble in water |
| N-OCTANOL / WATER PARTITION COEFFICIENT (a.i): | DDAC log P _{ow} = 1.0 at 20 °C, pH7 Glutaraldehyde log P _{ow} = - 0.01 at 20 °C, pH7 |
| VAPOUR PRESSURE (a.i): | DDAC = 5.9 X 10 ⁻⁰³ mPa at 20 °C Glutaraldehyde = 6.0 X 10 ⁴ mPa at 20 °C |
| RELATIVE VAPOUR DENSITY: | DDAC – Not applicable as very low volatility Glutaraldehyde – Relative vapour density (air 1) = 3.5 |
| PARTICLE CHARACTERISTICS: | Not applicable |
| CORROSION (METALS): | Non-corrosive to metals Aluminium, copper, carbon steel and brass = <0.08 mm/year. |
| COMPATABILITY: | Not compatible with concentrated anionic compounds. |
| STABILITY: | Stable at normal conditions. Tolerant of both acidic and alkaline medium (pH 3.5 – 9) |

10. STABILITY AND REACTIVITY

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| REACTIVITY: | No data available |
| CHEMICAL STABILITY: | Stable under normal use and storage conditions. |
| HAZARDOUS REACTION: | Product is stable and no hazardous reaction will occur during normal use. Hazardous decomposition products only produced during burning at extremely high temperatures. |
| CONDITIONS TO AVOID: | Do not store at high temperatures for long periods of time. |
| INCOMPATIBLE MATERIALS: | Avoid strong oxidising and strong reducing agents as well as anionic detergents. No hazardous reaction will take place, but the products efficacy will be compromised. |
| HAZARDOUS DECOMPOSITION PRODUCTS: | The substance decomposes on burning producing hazardous toxic fumes of nitrogen oxides and chloride. |

11. TOXICOLOGICAL INFORMATION

| | | ANIMAL ACUTE TOXICITY DATA |
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| ORAL: | LD ₅₀ (rat) = 300 – 2000 mg/kg bw | Category 4 |
| DERMAL: | LD ₅₀ (rat) > 5000 mg/kg bw | Not Classified |
| INHALATION: | LC ₅₀ (4h) rat = 0.5 – 1.0 mg/ℓ | Category 3 |
| SKIN IRRITATION / CORROSION: | | Category 2 |
| SERIOUS EYE IRRITATION / DAMAGE: | | Not Classified |
| RESPIRATORY OR SKIN SENSITIZATION: | | Category 1A (Skin) Category 1 (Respiratory) |
| GERM CELL MUTAGENICITY: | | Not Classified |
| CARCINOGENICITY: | | Not Classified |
| REPRODUCTIVE TOXICITY: | | Not Classified |
| SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: | | Not Classified |
| SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: | | Not Classified |
| ASPIRATION HAZARD: | | Not Classified |
| OTHER: | DDAC: Local irritancy and corrosion to skin and eyes. Cause respiratory irritation. Glutaraldehyde: Respiratory tract irritation | |

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

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| DDAC | Birds: LD ₅₀ (oral) Fish: LC ₅₀ | Not hazardous to birds. <i>Oncorhynchus mykiss</i> (Rainbow trout) Acute (96h) LC ₅₀ = 1.16 mg a.i./ℓ <i>Brachydanio rerio</i> (Zebrafish) NOEC = 0,032 mg a.i./ℓ (21-day) |
| | Aquatic invertebrates - <i>Daphnia</i> | <i>Daphnia magna</i> (Water flea) Acute (48h) EC ₅₀ = 0,094 mg a.i./ℓ Chronic (21-day) NOEC = 0,01 mg a.i./ℓ |
| | Algae - EC ₅₀ / NOEC | <i>Selenastrum capricornutum</i> Acute (72h) EC ₅₀ = 0,026 mg a.i./ℓ Chronic (96h) NOEC = 0,014 mg a.i./ℓ |
| | Bees | <i>Apis mellifera</i> Acute contact 48-hour LD ₅₀ = > 100 (µg.bee ⁻¹) |
| | Earthworms: LC ₅₀ /NOEC | <i>Eisenia fetida</i> Acute (14-day) LC ₅₀ > 1000 mg a.i./kg d.w. soil |
| GLUTARALDEHYDE | Birds: LD ₅₀ (oral) | <i>Anas platyrhynchos</i> (Mallard duck) Acute LD ₅₀ > 820 mg/kg |
| | Fish: LC ₅₀ | <i>Lepomis macrochirus</i> (Blue gill) Acute (96h) LC ₅₀ > 22.6 mg a.i./ℓ NOEC = 3.41 mg a.i./ℓ (21-day) |
| | Aquatic invertebrates - <i>Daphnia</i> | <i>Daphnia magna</i> (Water flea) Acute (48h) EC ₅₀ = 22.5 mg a.i./ℓ Chronic (21-day) NOEC = 4.2 mg a.i./ℓ |
| | Algae - EC ₅₀ / NOEC | <i>Pseudokirchneriella subcapitata</i> Acute (72h) EC ₅₀ = 132 mg a.i./ℓ |
| | Bees | <i>Apis mellifera</i> Acute contact (product) LD ₅₀ > 100 (µg.bee ⁻¹) |
| | Earthworms: LC ₅₀ /NOEC | Not available |
| AQUATIC TOXICITY: | Summation Method Aquatic Acute – Category 2 Aquatic Chronic – Category 2 | |
| PERSISTENCE, DEGRADABILITY AND MOBILITY: | This product is readily biodegradable. No long-term influence on nitrogen or carbon transformation in soils. | |
| BIO-ACCUMULATIVE POTENTIAL: | Low potential for bio-concentration. | |
| SOIL MICRO-ORGANISMS: | Carbon transformation | No significant adverse/long-term effect |
| | Nitrogen transformation | No significant adverse/long-term effect |

13. DISPOSAL CONSIDERATIONS

Product and waste: On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities.

TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Containers must be completely emptied before being disposed of. Invert the empty container over the spray or mixing tank and drain for at least 30 seconds until the flow has slowed down to a drip. Triple rinse the empty container with clean water equal to a minimum of 30 % of the volume of the container. Add rinsing to the contents of the spray tank. Offer container for recycling or puncture and dispose of at authorised landfill. Do not use container for any other purpose.

Contaminated packaging: If boxes are contaminated, allow to dry, and dispose of at authorised landfill.

14. TRANSPORT INFORMATION

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|------------------------------------|---|
| UN NUMBER: | 3082 |
| UN PROPER SHIPPING NAME: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DDAC and Glutaraldehyde) |
| TRANSPORT HAZARD CLASS(ES): | Class 9 |
| PACKAGING GROUP: | III (low danger) |

TRANSPORT PICTOGRAMS:**ENVIRONMENTAL HAZARDS:**

Marine Pollutant: Yes – Category 2

TRANSPORT IN BULK:

Not applicable, not to be transported in bulk.

SPECIAL PRECAUTIONS FOR USER:

Not applicable

15. REGULATORY INFORMATION

This product is registered in South Africa under the National Regulator for Compulsory Specification (NRCS) for chemical disinfectants as published by Government Notice No. 1119 (Government Gazette No. 41186) of 20 October 2017.

NRCS Registration Number: NRCS/8054/243642/537.

Conforms to South Africa Regulation for Hazardous Chemical Agents, 2021.

SDS valid for five years from date of issue.

16. OTHER INFORMATION

Legend: Full text of H-Statements referred to under sections 3:

H301 – Toxic if swallowed.

H314 – Causes severe skin burns and eye damage.

H319 – Causes serious eye irritation.

H330 – Fatal if inhaled.

H335 – May cause respiratory irritation.

H400 – Very toxic to aquatic life.

H412 – Harmful to aquatic life with long lasting effects.

Key literature references and sources of data: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 10, 2023. UN Model Regulations Rev. 22 (2023). EU REGULATION (EC) No 1272/2008.

This Safety Data Sheet (SDS) summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how to prevent accidents in the normal workplace including in conjunction with other products.

The information was obtained from sources which we believe are reliable. However, the information is provided in good faith. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and for these reasons we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used for this product only.

First print date: 17 February 2003

Issue: 3.5 – April 2024 (Section 14: Transport Information Updated).

END of SDS