

SAFETY DATA SHEET



FS1 Warewash Detergent

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: FS1 Warewash Detergent

OTHER NAMES: CDD Warewash
RECOMMENDED USE: Automatic dish washer liquid cleaner

SUPPLIER NAME: 2CARE PRODUCTS
ADDRESS: 9 Donnor Place
Mt Wellington
AUCKLAND

Phone: 0800 753 753
Fax: (09) 574 5999

Emergency Telephone: 0800 764 766 NEW ZEALAND NATIONAL POISON CENTRE

2. HAZARD(S) IDENTIFICATION

GLOBALLY HARMONISED SYSTEM

HAZARD CLASSIFICATION HAZARDOUS according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

HAZARD CATEGORIES

| | |
|-------------------------------|-------------|
| Corrosive to Metals | Category 1 |
| Skin Corrosion/Irritation | Category 1B |
| Serious Eye Damage/Irritation | Category 1 |
| Acute Toxicity (Oral) | Category 5 |

PICTOGRAMS



SIGNAL WORD

DANGER

HAZARD STATEMENTS

H290 – May be corrosive to metals.
H303 – May be harmful if swallowed.
H314 – Causes severe skin burns and eye damage.
H318 – Causes serious eye damage.

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PRECAUTIONARY STATEMENTS

PREVENTION

P102 – Keep out of reach of children.
P103 – Read label before use.
P104 – Read Safety Data Sheet before use.
P234 – Keep only in original container.
P260 – Do not breathe fumes.
P264 – Wash hands thoroughly after handling.
P280 – Wear protective gloves, clothing and eye/face protection.

RESPONSE

P101 – if medical advice is needed, have product container or label at hand.
P301 + P330 + P331 – **IF SWALLOWED**: Rinse mouth. Do **NOT** induce vomiting.
P303 + P361 + P353 – **IF ON SKIN**: Remove all affected clothing **IMMEDIATELY**. Rinse skin with water/shower.
P304 + P340 – **IF INHALED**: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 – **IF IN EYES**: Rinse cautiously for several minutes. **REMOVE** contact lenses if present and safe to do so. Continue rinsing.
P310 – **IMMEDIATELY** call a **POISON CENTRE** or Doctor/Physician.
P312 – Call a **POISON CENTRE** or Doctor/Physician if you feel unwell.
P363 – Wash contaminated clothing before re-use
P390 – Absorb spillage to prevent material damage.

STORAGE

P405 – Store locked up.
P406 – Store in corrosive resistant plastic container with a resistant inner liner.

DISPOSAL

P501 - Do not let this product enter the environment. Do not dispose of in waterways or sewers. Dispose of this material and its container as hazardous waste, via a licensed facility. See local council for disposal/recycling information.

ENVIRONMENTAL PROTECTION AUTHORITY (NEW ZEALAND)

HSNO CLASSIFICATIONS

Toxicity Hazards

6.1E Substances that are acutely toxic.
8.1A Substances that are corrosive to metal.
8.2B Substances that are corrosive to dermal tissue.
8.3A Substances that are corrosive to ocular tissue.

The information contained in this SDS is specific to the product when handled and used neat. This product when diluted may not require the same control measures as the neat product. Check with your technical representative if in doubt.

POISONS SCHEDULE (AUS): 6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

| Chemical Entity | Formula | CAS Number | Proportion |
|---------------------------|---------|------------|------------|
| Sodium Hydroxide | NaOH | 1310-73-2 | 11 - 15% |
| Non-Hazardous ingredients | | | Balance |

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4. FIRST AID MEASURES

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| INGESTION | DO NOT induce vomiting. If person is conscious give water to drink immediately to dilute the caustic soda. Seek urgent medical attention. |
| EYE CONTACT | IMMEDIATELY flush eyes with copious amounts of water for at least 30 minutes while holding eyelids open. Take care not to rinse contaminated water into the non-affected eye. Washing must be started within 10 seconds of contact and continued for 30 minutes to prevent permanent injury. Seek immediate medical attention. An Ophthalmology consultation is a must. |
| SKIN CONTACT | REMOVE contaminated clothing. IMMEDIATELY flush the contaminated skin thoroughly with water for at least 15 minutes. Seek medical attention URGENTLY if burning or irritation persists. |
| INHALATION | REMOVE victim from source of exposure to fresh air. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek immediate medical assistance if the effects persist Provide emergency. If needed transport to emergency medical facility without delay. |
| SAFETY MEASURES | Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers. Treat symptomatically. |
| PHYSICIAN NOTES | Treat symptomatically based on judgement of doctor and individual reactions of patient. |

Persons with lung diseases may be at an increased risk due to the toxic effects of this chemical on these organs.

5. FIRE FIGHTING METHODS

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| GENERAL MEASURES | Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. |
| FLAMMABILITY CONDITIONS | Product is not combustible. |
| EXTINGUISHING MEDIA | Use extinguishing media appropriate for surrounding fire. |
| HAZARDOUS PRODUCTS OF COMBUSTION | The product is non-combustible; however, the packaging material may burn to emit noxious fumes. Contact with metals may liberate hydrogen gas which is extremely flammable. |
| SPECIAL FIRE FIGHTING INSTRUCTIONS | DO NOT allow firefighting water to reach waterways, drains or sewers. |
| PERSONAL PROTECTIVE EQUIPMENT | Wear positive pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (including Helmet, Coat, Trousers, Boots and Gloves) or chemical splash suit. |
| HAZCHEM CODE | 2W |

6. SPILLAGE/ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------|---|
| GENERAL RESPONSE PROCEDURE | Clear area of all unprotected personnel. Allow only trained personnel wearing appropriate protective equipment to be involved in spill response. Contain spill, avoid accidents, clean up immediately. Increase ventilation. Avoid walking through spilled product as it is slippery when spilt. Use clean, non-sparking tools and equipment. Shut off all possible sources of ignition. CAUTION: Contact with metals may liberate hydrogen gas which is extremely flammable. |
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| CLEAN UP PROCEDURES | Mechanically collect as much of the spill as possible. Absorb with sand, earth or clay. Transfer to suitable, labelled corrosion resistant containers and dispose of promptly as hazardous waste. Spill on areas other than pavement (e.g. dirt and sand) may be handled by removing the affected soils and placing in approved containers. |
| CONTAINMENT | Stop leak if safe to do so. Contain spill immediately. |
| DECONTAMINATION | Dilute acid (preferably acetic acid may be used to neutralise residual traces of caustic soda) after flushing. |
| ENVIRONMENTAL PRECAUTIONARY MEASURES | Prevent run off into drains and waterways. If contamination of sewers or waterways has occurred advise the Environmental Protection Authority and/or your local Waste Authority. |
| EVACUATION CRITERIA | Evacuate all non-essential personnel. |
| PERSONAL PRECAUTIONARY MEASURES | Personnel involved in the clean-up should wear full protective clothing as listed in section 8. |

7. HANDLING AND STORAGE

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| HANDLING | <p>Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Avoid contact with eyes, skin and clothing. Do not inhale product vapours. Avoid prolonged or repeated exposure. Do not smoke, eat or drink when handling product.</p> <p>When used in its various applications, the product must be prevented from coming into uncontrolled direct contact with other products such as acids and metals. Always remove contaminated clothing and wash hands before eating, drinking, smoking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.</p> |
| STORAGE | <p>Store upright in the original container in a cool, dry, well-ventilated protected area out of direct sunlight and away from incompatible materials and foodstuffs. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Do not combine part containers of the same product. The floor must be waterproof and anti-slip.</p> <p>A water supply or source must be provided in the place of storage. Emergency showers and eye-washes must be available.</p> <p>Keep out of reach of children.</p> |
| CONTAINER | Store in original packaging as approved by manufacturer. Do not store in Aluminium or galvanised containers nor use die cast zinc or aluminium fittings (e.g. valves and bungs.) |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|-------------------|---|
| GENERAL | Sodium Hydroxide – WES-Ceiling 2mg/m ³ (WorkSafe New Zealand). |
| EXPOSURE LIMITS | No information available. |
| BIOLOGICAL LIMITS | No information available on biological limit values for this product. |

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| ENGINEERING MEASURES | A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Adequate ventilation should be provided so that exposure limits are not exceeded. | |
| PERSONAL PROTECTIVE EQUIPMENT | RESPIRATOR | If determined an inhalation risk is present. Use a P2 grade disposable mask which conforms to the requirements of AS1715/1716). |
| | EYES | Use splash proof safety goggles, and/or if necessary an appropriate full face shield that conform to AS1336/1337. |
| | HANDS | Any Gloves approved for chemical hazards that conform to AS2161. |
| | CLOTHING | Trousers, Long sleeved shirt and closed shoes. |

9. PHYSICAL AND CHEMICAL PROPERTIES:

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|-----------------|---|
| PHYSICAL STATE | Liquid |
| APPEARANCE | Free flowing |
| COLOUR | Red |
| ODOUR | Odourless |
| pH | 12.0 – 13.0 |
| DENSITY | 1.176g/mL @20°C |
| VAPOUR PRESSURE | No Data Available |
| VAPOUR DENSITY | No Data Available |
| BOILING POINT | No Data Available |
| FREEZING POINT | No Data Available |
| SOLUBILITY | Complete in water |
| SHELF LIFE | 2 years from manufacturing date (when stored as directed) |

10. STABILITY AND REACTIVITY

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|----------------------------------|--|
| GENERAL INFORMATION | Corrosive Liquid. |
| CHEMICAL STABILITY | The substance is stable under normal environmental and foreseeable conditions of temperature and pressure during storage and handling. |
| CONDITIONS TO AVOID | Avoid contact with foodstuffs. Do not combine part drums of the same product. |
| MATERIALS TO AVOID | Incompatible with ammonium salts, aluminium, tin, and zinc. |
| HAZARDOUS DECOMPOSITION PRODUCTS | The packaging material may burn to emit noxious fumes. Contact with metals may liberate hydrogen gas. |

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11. TOXICOLOGICAL INFORMATION

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| ORAL | No information available. |
| DERMAL | Irritation data: Skin, Mouse: 500 mg/24hr. Causes severe skin burns. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. |
| INHALATION | No Information available. |
| EYE | Eye, Rabbit: 40 µg/24hr Causes serious eye damage. Can cause ulceration of the conjunctiva and cornea. |
| CARCINOGENICITY | No information available. |
| MUTAGENICITY | No information available. |
| REPRODUCTIVE | No information available. |
| TARGET ORGAN | Causes damage to organs. No LD ₅₀ Information available. |
| LONG TERM | No information available. |

12. ECOLOGICAL INFORMATION

| | |
|--------------------------------|--|
| ECOTOXICITY | No information available. |
| PERSISTENCE / DEGRADABILITY | Readily biodegradable. Other relevant information Abiotic degradation: NaOH is a strong alkaline substance that dissociates completely in water to Na ⁺ and OH ⁻ . High water solubility and low vapour pressure indicate that NaOH will be found predominantly in aquatic environment. This implies that it will not adsorb on particulate matter or surfaces. Atmospheric emissions as aerosols are rapidly neutralized by carbon dioxide and the salts will be washed out by rain. |
| MOBILITY | High water solubility and mobility. |
| ENVIRONMENTAL FATE | Do not allow drainage into sewer, streams or storm water systems. |
| BIOACCUMULATION POTENTIAL | Sodium Hydroxide does not bioaccumulate in organism. In addition, sodium is a naturally occurring element that is prevalent in the environment and to which organism are exposed regularly for which they have some capacity to regulate the concentration in the organism. |
| ENVIRONMENTAL IMPACT | No information available. |

13. DISPOSAL CONSIDERATIONS

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|-------------------------------------|--|
| GENERAL INFORMATION | Dispose of in accordance with all local, regional and national regulations. All empty packaging should be disposed of in accordance with local, regional, and national regulations or recycled/reconditioned at an approved facility. |
| SPECIAL PRECAUTIONS FOR LANDFILL | Containers should be triple rinsed then rinsed with dilute hydrochloric acid to neutralise sodium hydroxide residues which should be added slowly by trained staff wearing proper protection. Disposal of this product must comply with any requirements of the Resource Management Act for which approval should be sought from the Regional Authority. |

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14. TRANSPORT INFORMATION

LAND TRANSPORT NEW ZEALAND (NZS5433)

| | |
|----------------------|--|
| PROPER SHIPPING NAME | Sodium Hydroxide Solution |
| UN NUMBER | 1824 |
| CLASS | 8 – Corrosive Substances |
| SUBSIDIARY RISK | No Data Available |
| PACKAGING GROUP | III |
| HAZCHEM | 2W |
| EPG | 37 Toxic and/or Corrosive Substances Non-Combustible |
| SPECIAL PROVISIONS | No Data Available |

SEA TRANSPORT (IMDG)

| | |
|----------------------|---------------------------|
| PROPER SHIPPING NAME | Sodium Hydroxide Solution |
| UN NUMBER | 1824 |
| CLASS | 8 – Corrosive Substances |
| SUBSIDIARY RISK | No Data Available |
| PACKAGING GROUP | III |
| HAZCHEM | 2W |
| EMS | F-A, S-B |
| MARINE POLLUTANT | No Data Available |
| SPECIAL PROVISIONS | No Data Available |

AIR TRANSPORT (IATA)

| | |
|----------------------|--|
| PROPER SHIPPING NAME | Sodium Hydroxide Solution |
| UN NUMBER | 1824 |
| CLASS | 8 – Corrosive Substances |
| SUBSIDIARY RISK | No Data Available |
| PACKAGING GROUP | III |
| HAZCHEM | 2W |
| EPG | 37 Toxic and/or Corrosive Substances Non-Combustible |
| SPECIAL PROVISIONS | No Data Available |

15. REGULATORY INFORMATION

ENVIRONMENTAL PROTECTION AUTHORITY (NEW ZEALAND)

Hazardous Substances & New Organisms Act 1996

| | |
|----------------------|---|
| APPROVAL CODE | HSR002526 – Cleaning Products (Corrosive) Group Standard 2006 |
| HSNO CLASSIFICATIONS | 6.1E, 8.1A, 8.2B, 8.3A |
| APPROVED HANDLER | Not Required |
| NZIOC | Listed |

16. OTHER INFORMATION

| | |
|-----------------|---------------------------|
| REVISION NUMBER | 1 – New Issue |
| ISSUE DATE | 12 th May 2017 |

In any event the review and if necessary re-issue of an SDS shall be no longer than 5 years after the last date of issue.

| | |
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| KEY/LEGEND | AS1336/1337 Industrial Eye Protection – Metric Units (Standards Australia). |
| | AS1715/1716 Respiratory Protection Devices – Metric Units (Standards Australia). |

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| AS2161 | Industrial Safety Gloves and Mittens (Standards Australia). |
| CAS | Chemical Abstracts Service. |
| EC ₅₀ | Concentration which induces a response halfway between the baseline and maximum. |
| EMS | IMDG Emergency Schedule. |
| EPG | Emergency Procedures Guide. |
| GHS | Globally Harmonised System. |
| HSNO | Hazardous Substances and New Organisms. |
| IMDG | International Maritime Dangerous Goods. |
| LC ₅₀ | Concentration required to kill half the members of a tested population after a specified duration. |
| LD ₅₀ | Dosage required to kill half the members of a tested population after a specified duration. |
| NOEC | No Observed Effect Concentration. |
| NZIOC | New Zealand Inventory of Chemicals. |
| SDS | Safety Data Sheet. |
| UN No. | UN Nations Number. |
| WES-Ceiling | Concentration that should not be exceeded at any time during any part of the working day. |

REFERENCES

Workplace Exposure Standards-and Biological Exposure Indices – WorkSafe New Zealand.
TOXNET – ChemIDPlus Database.
IMDG Appendix B List of Marine Pollutants.
IMDG Emergency Fire and Spill Codes.
UN Recommendations on the Transport of Dangerous Goods Volume 1 (17th Edition) Part 3.

This SDS has been prepared from current technical data and summarises at the date of issue our best knowledge of the health and safety information of the product, and in particular how to safely handle and use the product in the work place. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact the company.

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