SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

X-CLEAN DOO-AWAY®

Concentrated Dairy Shed Cleaner

Cosmos and Damian Limited 31 Waitete Road, Te Kuiti, New Zealand Mailing Address: P.O.BOX 6013, Urlich, Hamilton 3206 Phone: 0800 366 292 E-mail: info@xclean.co.nz Website: www.xclean.co.nz

EMERGENCY CONTACT: Phone 0800 366 292, Mon to Fri - 8am to 5pm
After Hours: National Poisons & Hazardous Chemical Information Centre: 0800 764 766 (0800 POISON)

2. HAZARD IDENTIFICATION

This material is hazardous according to criteria of EPA New Zealand.

EPA Group Standard: HSR002526 - Cleaning Products (Corrosive) Group Standard

Signal Word
Danger

Hazard Classifications
6.1D - Substances that are acutely toxic - Oral
6.1E - Substances that are acutely toxic - Dermal
6.1D - Substances that are acutely toxic - Inhalation - vapours, dusts or mists
8.1A - Substances that are corrosive to metals
8.2B - Substances that are corrosive to dermal tissue
8.3A - Substances that are corrosive to ocular tissue
9.1D - Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action (H402)

Hazard Statements
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H313 May be harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H332 Harmful if inhaled.
H402 Harmful to aquatic life.

Prevention Precautionary Statements
P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P234 Keep only in original packaging.
P260 Do not breath mist, vapours or 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.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing including eye/face protection and suitable respirator.

Response Precautionary Statements
P101 If medical advice is needed, have product container or label at hand.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor/insert appropriate source of emergency medical advice.
P330 Rinse mouth.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.

Storage Precautionary Statements

P405 Store locked up.

P406 Store in corrosive resistant insert appropriate compatible material container with a resistant inner liner.

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 8

3. COMPOSITION & INFORMATION ON INGREDIENTS

Sodium Hydroxide	(CAS# 1310-73-2) 20-40%
Surfactant	<5%
Ingredients determined to be Non-Hazardous :	Balance

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.
Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If
blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.
Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.
Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Immediately call Poisons Centre or Doctor.

PPE for First Aiders: Wear safety shoes, overalls, gloves, apron, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from butyl rubber, nitrile
rubber, neoprene, polyvinyl chloride (PVC) should be suitable for intermittent contact. However, due to variations
in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Can cause corneal burns

5. FIRE FIGHTING MEASURES

This product is neither flammable nor combustible. Containers subject to the heat of a prolonged fire may explode or erupt scattering contents. Where possible remove drums and containers from the path of a fire, or cool with water spray.
Firefighters must wear SCBA and chemical resistant suits. Firefighters may use fog (preferred) or water spray (not jet), foam, CO_2, or dry chemical powder to extinguish a fire in the vicinity.

6. ACCIDENTAL RELEASE MEASURES

Spills on floors will produce a slippery surface. Signage preventing foot traffic should be erected where appropriate.
Minor spills (up to 20 litres) should be diluted with water, neutralised where possible and removed with mops, absorbed with Mineral Sponge, dry rags, paper, sand, or soil. It may be possible to drain small neutralised spills to wastewater where this is permitted.
Large spills (drums and IBCs) should be contained from local drainage with any suitable bund or barrier. If possible dilute the spill without increasing the possibility of non-containment, and clean up with absorbant material such as Mineral Sponge, dry earth, sand, or soil. Where a liquid suction cleaning machine is available, it should be used only after neutralising the spill.

Dangerous Goods - Initial Emergency Response Guide No: 37

7. HANDLING AND STORAGE

Precautions for Safe Handling: Keep out of reach of children. Read label before use. Keep only in original container. Do not breathe spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves, protective clothing and eye /face protection.
Precautions for Safe Storage: Store in corrosive resistant or original container with a resistant inner liner. Store locked

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Handle to prevent damage to containers. Should packaging be damaged, repack into clean and dry containers of the same type and mark the product name carefully on the container. Always replace lids and caps after using the product. Return all packages to safe storage as soon as possible after use.

9. EXPOSURE CONTROLS & PERSONAL PROTECTION

National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Sodium hydroxide					**Ceiling 2**

As published by WorkSafe New Zealand.

WES-TWA (Workplace Exposure Standard - Time-weighted average). The average airborne concentration of a substance calculated over an eight-hour working day.

WES-Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded at any time during any part of the working day.

WES-STEL (Workplace Exposure Standard - Short-term exposure limit). The 15-minute time weighted average exposure standard. Applies to any 15-minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time- weighted average exposures apply. Exposures at concentrations between the WES-TWA and the WES-STEL should be less than 15 minutes, should occur no more than four times per day, and there should be at least 60 minutes between successive exposures in this range.
These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.
If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.
Biological Limit Values: As per the WorkSafe New Zealand the ingredients in this material do not have a
Biological Limit Allocated.
Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.
Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, APRON, SAFETY GLASSES, RESPIRATOR.
Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.
Wear safety shoes, overalls, gloves, apron, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and
AS/NZS 1716. Available information suggests that gloves made from butyl rubber, nitrile rubber, neoprene, polyvinyl chloride (PVC) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.
Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

10. PHYSICAL AND CHEMICAL PROPERTIES

Appearance .....Clear amber coloured liquid
Odour .....None
pH .....14.0 1% soln 13
Flash Point .....Not applicable
Ignition Point .....Not applicable
Specific Gravity 1.36
Refractive Index .....48.5 Bx
Viscosity .....Low
Relative Foam .....Medium
Solubility in water .....Completely in all proportions

11. STABILITY AND REACTIVITY

The product is considered stable under normal storage conditions. Avoid contamination with oxidising substances.
Hazardous polymerisation will not occur.
Combustion of this product will release oxides of carbon.

12. TOXICOLOGICAL INFORMATION

No data is available for the product.
Sodium hydroxide: LD50 Rabbit 1350 mg/kg

13. ECOLOGICAL INFORMATION

No data is available for the product.
Sodium hydroxide: LC50 Oncorhynchus mykiss (freshwater fish) 45.4 mg/l 96 hr.

14. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations by recognised waste disposal experts. Landfill or incineration is the preferred method. Spilled liquids may be neutralised, diluted, and disposed of through town wastewater systems where these are authorised for industrial use.Wash empty plastic containers before recycling.

15. TRANSPORT INFORMATION

NZ Land Transport Rule: Dangerous Goods Rule 2005
UN Number: 1824
Proper shipping name: Sodium hydroxide solution
Packing Group: II

Classified as a Dangerous Goods for Land Transport in New Zealand.
Dangerous Goods Class: 8
Hazchem Group: 2R

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.

16. NZ REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)

The Stockholm Convention (Persistent Organic Pollutants) The Rotterdam Convention (Prior Informed Consent)

Basel Convention (Hazardous Waste)

International Convention for the Prevention of Pollution from Ships (MARPOL)

• All components of this product are listed on or exempt from the New Zealand Inventory of Chemical

(NZIoC).

EPA Group Standard: HSR002526 - Cleaning Products (Corrosive) Group Standard

Approved handler	No
Location test certificate	No
Fire extinguishers	No
Signage	Yes
Emergency response	Yes
Hazardous atmosphere zone	No

17. OTHER INFORMATION

Formulation reference and version number: Lab S2-173 Ver8. This SDS was printed on 8 May 2023
This SDS will be reviewed no later than 8 May 2028