

SAFETY DATA SHEET

Product Name *Mower Plus*

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: *Mower Plus*
Recommended use: **Concentrated Dairy Shed Cleaner**
Company Details: **Envirochem International (NZ) Ltd**
Address: 41 Angle Street, Onehunga
Auckland. New Zealand
Telephone Number: +64 9 262 0800
Emergency Telephone Number: National Poison Information Centre 0800 764 766
Date of Preparation: 01/06/2017

2. HAZARD IDENTIFICATION



TOXIC



CORROSIVE

HSNO Hazard Classification: 6.1D, 8.1A, 8.2B, 8.3A, 9.1D

Hazard Statement:

May be corrosive to metal
Causes severe skin burns and eye damage
Causes serious eye damage
Harmful if inhaled
May cause long lasting harmful effects to aquatic life
Harmful to terrestrial vertebrates
Toxic to aquatic life
Harmful to aquatic life
May cause long lasting harmful effects to aquatic life

Prevention Statements:

- Keep out of reach of children.
- Read label before use.
- Read Safety Data Sheet before use.
- Keep in original container.
- Avoid breathing dust/fumes/gas/mist/vapours/spray.
- Wash hand thoroughly after handling
- Use only outdoor or in a well-ventilated area
- Avoid release into environment
- Wear protective gloves/clothing and eye/face protection

Response Statement:

- If medical advice is needed, have product container or label at hand
- Immediately call a POISON CENTRE or doctor/physician
- Call a POISON CENTRE or doctor/physician if you feel unwell
- Do NOT induce vomiting.
- Wash contaminated clothing before use
- Absorb spillage to prevent material damage
- If swallowed: Rinse mouth DO NOT induce vomiting
- If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, continue rinsing
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Storage Statement:

- Store in corrosive resistant container with a resistant inner lining

Disposal

- Disposal should be through qualified contractor.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS #	Concentration %
Sodium Hydroxide	1310-73-2	500g per liter
Surfactant		2-10%
Surface Treatment		2-10%
Water	7732-18-5	Balance

4. FIRST AID MEASURES

Ingestion:

Immediately rinse mouth with water. If swallowed do not induce vomiting. Give water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical aid immediately.

Eye Contact:

Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Transport to the nearest medical facility for additional treatment. Do not rub eyes or keep eyes closed

Skin Contact:

Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.

Inhalation:

Remove the effected person out to a ventilated area. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

5. FIRE FIGHTING MEASURE

Extinguishing Media:

Use dry chemical powder, foam, polymer foam, and water spray or fog type extinguishers. Water may be ineffective on fire. However, water spray may be used to extinguish fires and to absorb heat. Keep containers cool and protect exposed material. If a leak or spill has not ignited, water spray may be used to flush spills away from exposures.

Hazards from combustion products:

Not combustible. However, following evaporation of aqueous component, residual material can burn if ignited. While burning, it will emit toxic fumes including carbon monoxide and carbon dioxide.

Precautions for fire fighters and special protective equipment:

Alert fire brigade and tell them location and nature of hazard.

- Wear breathing apparatus plus protective gloves
- Prevent, by any means available, spillage from entering drains or water courses

Use fire fighting procedure suitable for surrounding area.

Use water delivered as a fine spray to control the fire and cool adjacent area.

Fire fighters to wear self-contained breathing apparatus if risk of exposure to Vapour or products of combustion as well as structural fire fighter uniform.

6. ACCIDENTAL RELEASE MEASURES

Emergency Precautions:

Personnel involved in the clean up should wear full protective clothing. Evacuate all unnecessary personnel. Increase ventilation. Avoid walking through spilled product as it may be slippery. Stop leak if safe to do so. Do not let product reach drain or waterways; advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment.

Methods and Materials for Containment and Clean Up:

Soak up spilled product using absorbent, non-combustible material such as sand or soil. Avoid using sawdust or cellulose. When saturated, collect material into suitable, labelled, dry, sealable containers and hold for safe disposal. Once pick-up is complete, flush spill site with plenty of water to eliminate any residue. Hold contaminated water for treatment/disposal.

7. HANDLING AND STORAGE

Handling:

Wash thoroughly after handling. Use only in a well ventilated area. Avoid contact with eyes, skin and clothing. Empty containers retain product and residue (liquid or vapour), and can be dangerous. Keep container tightly closed. Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Do not dispose of material to sewers or waterways.

Storage:

Store in a tightly closed container. Keep from contact with oxidizing agents. Store in cool, dry, well-ventilated area away from incompatible substances. Keep containers closed at all times, check regularly for leak.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards:

The Occupational Safety and Health Service, NZ Department of Labour have set no Tolerable Exposure Limit (TEL) Workplace Exposure Standards (WES) for this substance.

Biological limit values:

None established

Engineering Controls:

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion proof ventilation equipment

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection:

Where concentration in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half face filter mask to protect from overexposure by inhalation. A type "A" filter material is considered suitable for this product.

Eye Protection:

Always use safety glasses or a face shield when handling this product.

Skin/Body Protection:

Always wear long sleeves and long trousers or coveralls, enclosed footwear or safety boots and chemical resistant gloves when manufacturing this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear amber coloured
Physical State:	Liquid
Odour:	Odourless
pH:	13-14
Solubility:	soluble in water
Vapour Density:	Not available
Ignition Point:	Not applicable

Flash Point: Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature and pressure.
Conditions to avoid: Avoid contamination with Oxidising substances.
Incompatible Materials: Incompatible with Oxidising agents

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with the safety data sheet. Symptoms or effects that may arise if the product is mishandled and the overexposure occurs are:

Acute Effects

Ingestion:

Small amounts of liquid aspirated into lungs during ingestion, or from vomiting. Ingestion of large amounts of this product will result in headaches, nausea, dizziness and tracheal burning.

Eye Contact:

This product is irritating and pain followed by swelling to the conjunctiva.

Skin Contact:

This product is irritating to skin.

Inhalation:

Irritating to respiratory tract. Exposure to high concentrations over an extended period of time may result in muscle weakness, tingling in hands and feet, blurred vision, headaches, nausea, loss of appetite, hallucinations and possible loss of consciousness.

Chronic Health Effects

Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue.

Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical

Toxicity and Irritation

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterized by skin redness (erythema) thickening of the epidermis. <</>

Toxicological information

Sodium Hydroxide LD50 Rabbit 1350 mg/kg

12. ECOLOGICAL INFORMATION

The material and its container must be disposed of as hazardous waste.

Persistence/ degradability: Water/Soil- LOW
Mobility: High
Bioaccumulation: LOW.

Sodium Hydroxide: LC50 Oncorhynchus mykiss (freshwater fish) 45.4 mg/l 96hr

13. DISPOSAL CONSIDERATIONS

Disposal Methods:

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still

contain fumes and vapours that are flammable and harmful.

Special precautions for landfill or incineration:

This product is not suitable for disposal by either landfill or via municipal sewers, drain, natural streams or rivers. This product is ash less and can be burned directly in appropriate equipment.

14. TRANSPORT INFORMATION

Road and Rail Transport:

Classified as Dangerous Goods by the criteria of New Zealand Dangerous Goods Code for transport by road and rail

Marine Transport:

Classified as Dangerous Goods by the criteria of international Maritime Dangerous Goods Code for transport by sea.

Air Transport:

Classified as Dangerous Goods by the criteria of international Air Association Dangerous Goods Regulations for transport by air



Shipping Name:	Sodium Hydroxide Solution
Hazard Class:	8
UN Number:	UN 1824
Packing Group:	II
Hazchem Code:	2R

15. REGULATORY INFORMATION

HSNO Approval No:	HSR002526
Group Standard:	Cleaning Products Corrosive Group Standard 2006
HSNO Classification:	6.1D, 8.1A, 8.2B, 8.3A, 9.1D

16. OTHER INFORMATION

New Zealand National Poison Information Centre:	0800 764 766
New Zealand Emergency Services:	111
Envirochem International (NZ) Ltd :	+64 9 262 0800

Every endeavour has been made to ensure that the information contained in this publication is reliable and offered in good faith. It is meant to describe the safety requirements of our products and should not be construed as guaranteeing specific properties. Customers are encouraged to conduct their own tests as end user suitability of the product for particular uses is beyond our control. The information is not intended as an inducement to bargain and no warranty expressed or implied is made as to its accuracy, reliability or completeness. Envirochem International (NZ) Limited accepts no liability for loss, injury or damage arising from reliance upon the information contained in this data sheet except in conjunction with the proper use of the product to which it refers. Due care should be taken that the use and disposal of this product is in compliance with appropriate Local Councils regulations.