

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: **MOSS & MOULD KILLER (AMAZING HASTE)**

Other Names: Slow Release Moss & Mould Remover, Benzalkonium Chloride,

Recommended Use: Outdoor cleaning product for hard surfaces, e.g. boats, bricks, caravans, concrete, decks, driveways, fences, pathways, masonry.

Supplier: TMK Packers Ltd

Address: 2/20 Trugood Drive, East Tamaki.
PO Box 258 031, Botany, Manukau 2163

Telephone: (+64) 9 273 3753

Facsimile: (+64) 9 273 3752

Website: www.tmkpackers.co.nz

Emergency phone: **National Poison Centre**
0800 POISON [0800 764 766]



2. HAZARDS IDENTIFICATION

Product is classified as hazardous according to Schedules 1 to 6 of the *Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001* of the HSNO Act, 1996.

HSNO Classifications: 6.1E, 6.3A, 6.4A, 6.5A, 6.5B, 6.9B, 9.1B

Signal word: **DANGER**

Hazard Statements :

H303 May be harmful if swallowed

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H373 May cause damage to organs through prolonged or repeated exposure

H411 Toxic to aquatic life with long-lasting effects

Prevention Statements :

P102 Keep out of reach of children

P103 Read label before use

P260 Do not breathe mist or spray

P264 Wash hands thoroughly after handling

P272 Contaminated work clothing should not be allowed out of the workplace



P273 Avoid release to environment
P280 Wear gloves and eye protection
P285 In case of inadequate ventilated wear approved respiratory protection

3. COMPOSITION : Information on Ingredients

| Chemical Ingredient | CAS No. | Proportion (%) |
|--------------------------|-----------|----------------|
| Benzalkonium chloride | 8001-54-5 | 1 - 10 |
| Nonylphenol, ethoxylated | 9016-45-9 | 1 - 10 |
| Water | 7732-18-5 | > 80 |

4. FIRST AID MEASURES

For advice, contact National Poison Centre (0800 POISON ; 0800 764 766) or a doctor.
Have product container or label available.

Swallowed

If swallowed, do NOT induce vomiting. Give water to drink. Get medical advice.

Skin Contact

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If irritation persists or rash develops, get medical attention.

Eye Contact

Hold eyelids apart and flush the eye continuously with running water. Continue flushing for at least 15 minutes. Remove contact lenses if present and easy to do, after the first 5 minutes and continue rinsing. Get medical attention if irritation persists.

Inhalation

Move the victim to fresh air immediately. Keep warm and at rest until recovered. Get medical attention if symptoms continue.

First Aid Facilities: Provide eye bath and hand washing facilities.

Advice to Doctor: Treat according to symptoms.

5. FIRE FIGHTING MEASURES

Flashpoint: Non flammable
Flammable limits: LFL : not available UFL: not available

Extinguishing media:

Water, foam, CO₂, dry chemical.

Fire & Explosion hazards:



Do not breathe smoke, gases or vapours generated in a fire. Decomposition products may be toxic.

Firefighting Equipment:

Full protective clothing and self-contained breathing apparatus (SCBA).

In event of fire:

- Alert Fire Bridge (111); advise location and nature of hazard.
- Wear breathing apparatus and protective gloves.
- Shut off product that may 'fuel' a fire if safe to do so.
- If safe, switch off electrical equipment until vapour hazard removed.
- Allow trained personnel to attend a fire in progress, providing fire-fighters with this Safety Data Sheet.
- Prevent product and extinguishing media from escaping to drains and waterways.

Hazards from combustion products:

Product will emit toxic fumes.

Hazchem Code: 3Z

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures & Containment:

Refer to "Fire Fighting Measures", "First Aid Measures" and "Stability and Reactivity".

Minor spills

- Clean up spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Wear personal protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Collect residues and waste material in a labelled container.
- Seal container and dispose of safely.

Major spills

- Clear area of personnel and move upwind.
- Alert Fire Bridge (111); advise location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.
- Prevent by any means available, spillage from entering drains, sewers, watercourses, or low-lying areas.
- Increase ventilation.
- Collect recoverable product into labeled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent run off into drains.
- If contamination of drains or waterways occurs, advise Emergency Services and Local or



Regional authority.

7. HANDLING AND STORAGE

Precautions for safe handling:

Read product label before use. Use in well-ventilated area. Avoid all personal contact including by inhalation. Wear personal protective equipment and clothing including gloves and wash hands with soap and water after handling. Do not eat, drink or smoke when using product. Do not allow clothing contaminated or wetted with product to stay in contact with skin.

Conditions for safe storage:

Store in original packaging in a cool, dry well-ventilated place out of reach of children. Check containers periodically for leaks or distortion.

Incompatible materials:

None identified.

8. EXPOSURE CONTROLS : PERSONAL PROTECTION

Health Exposure Standards:

No Workplace Exposure Standards (WES) have been set by the Occupational Safety and Health Service, NZ Department of Labour for this product.

Biological limit values: None established

Engineering Controls:

Ventilation: Avoid breathing vapours, mist or spray. Use product outdoors or in well-ventilated area.

Personal Protective Equipment:

Respiratory Protection: Not normally required. Wear a SAA approved respirator when using in confined area or where over-exposure risk exists.

Eye Protection: Protect eyes from splashes. Always use safety glasses with side shields, or wear goggles.

Skin/ Body Protection:

Wear gloves, e.g. PVC or nitrile, also safety footwear or safety gumboots, e.g. rubber, and clothing with long sleeves and long trousers or coveralls.

9. PHYSICAL AND CHEMICAL PROPERTIES



| Property | Unit of measurement | Typical value |
|----------------------------|---------------------|-------------------------|
| Appearance | - | Green liquid |
| Odour | - | No distinguishing odour |
| Flash Point | °C | > 100 °C |
| Specific gravity @ 20°C | g/ml | ~ 1.0 |
| Vapour Pressure @ 20°C | mm Hg | Not available |
| Vapour Density @ 20°C | kPa | Not available |
| Explosive Limits in Air | % | Not available |
| Viscosity | cSt | Not available |
| Volatiles | %vol/vol | Not available |
| Alkalinity/acidity (as pH) | - | Not available |
| Solubility in Water | % w/w | Miscible |

The values listed are indicative of this product's physical and chemical properties.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature and pressure.

Conditions to avoid: No specific information available.

Hazardous decomposition products: No decomposition products except on burning. See "Fire Fighting Measures" and "Hazardous Reactions".

Hazardous reactions: No specific information available.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

Unlikely to be harmful however gastrointestinal tract discomfort may result in nausea and vomiting.

Eye Contact

This product may be irritating to the eyes resulting in tearing and redness. Repeated or prolonged exposure will aggravate and symptoms (redness) and may also lead to blurred vision and transient eye damage or ulceration.

Skin Contact

This product can be irritating to the skin and cause an allergic skin reaction.

Inhalation

Vapours and mist may cause discomfort including allergic or asthma like symptoms.

Chronic Effects: No specific ill-effects identified.



Other Health Effects Information: No specific ill-effects identified.

Toxicological Information:

Benzalkonium chloride

Oral, LD₅₀, mouse 150 mg/kg

Dermal, LD₅₀, rat 1420 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Aquatic toxicity:

Product has been identified as being toxic to aquatic life (fish, crustacea, algae).

Persistence/degradability:

Not expected to be persistent nor bioaccumulative.

Mobility:

No information available.

Other information:

Benzalkonium chloride

Fathead minnow

EC₅₀ (96hr) 0.28 mg/L

Environmental Exposure Standards:

EEL (WATER):

Not set

EEL (SOIL)

Not set

EEL (SEDIMENTS)

Not set

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, regional and local authority regulations. Packaging may still contain product residue.

14. TRANSPORT INFORMATION

UN Number: 3082

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
(CONTAINS BENZALKONIUM CHLORIDE)

Class: 9

Packing group: III

Hazchem code: 3Z

Dangerous Goods Segregation

This product is classified as Dangerous Good Class 9.

Please consult NZS 5433:2007 Transport of Dangerous Goods on Land for information.

15. REGULATORY INFORMATION



Country/ Region: New Zealand

Inventory: NZCIL

Status: Listed

ERMA New Zealand Approval Code:

HSR002530 Cleaning Product (Subsidiary Hazard) Group Standard 2006.

Refer www.ermanz.govt.nz for information on Controls.

16. OTHER INFORMATION

Date of Issue: 27th April, 2010

Reasons for Issue: Change in format; add heading.

Replaces: 26th March 2010

Abbreviations:

| | |
|--------|---|
| CAS No | Chemical Abstracts Number |
| ERMA | Environmental Risk Management Authority |
| HSNO | Hazardous Substances and New Organisms |
| NZCI | New Zealand Chemical Inventory |
| STEL | Short Term Exposure Limit |
| TWA | Time Weighted Average |
| WES | Workplace Exposure Standard |

References:

Supplier Material Safety Data Sheets

ERMA website: www.ermanz.govt.nz

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact TMK Packers Ltd.

END OF SAFETY DATA SHEET

