



SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER:

Product Name:	Tui Seaweed Plant Tonic
Recommended Use:	Liquid seaweed plant tonic for use in the home garden.
Company Address & Telephone Number:	Tui Products Ltd, Truman Lane, Mount Maunganui, New Zealand +64 7 5752160
Emergency Telephone Numbers:	0800 CHEMCALL (0800 243 622) 24 hours 0800 POISON (0800 764 766) National Poisons Centre 111 – New Zealand Fire Service

2. HAZARDS IDENTIFICATION:

EPA Hazard Classifications:	Based on available information, this material is not classified as hazardous according to the criteria of EPA New Zealand GHS 7.
Dangerous Goods Classifications:	Not classified as Dangerous Goods by the criteria of the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

3. COMPOSITION/INFORMATION ON INGREDIENTS:

COMPONENT	CONCENTRATION	CAS NUMBER
Potassium Hydroxide	<0.1%	1310-58-3
Non-hazardous components	100%	-

4. FIRST AID MEASURES:

For advice, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor/physician.

Inhalation:	If inhaled, remove affected person from contaminated area. Keep at rest until fully recovered. If symptoms develop and/or persist seek medical attention.
Ingestion:	If swallowed, Do NOT induce vomiting. Wash mouth thoroughly with water. Seek medical attention.
Eye Contact:	If in eyes, hold eyelids apart and immediately flush the eyes continuously with cold running water. Remove contact lenses, if present and easy to do. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.
Skin Contact:	If on skin, wash the skin well with plenty of water and soap whilst removing contaminated clothing. Wash contaminated clothing before re-use. Seek medical attention.
Advice to Doctor:	Treat symptomatically.

5. FIRE FIGHTING MEASURES:

Suitable Extinguishing Media:	Use appropriate fire extinguisher for surrounding environment.
Precautions for fire fighters and special protective clothing:	Fire fighters to wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.
Hazards from combustion products:	Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including oxides of nitrogen, carbon monoxide and carbon dioxide. Do not allow contaminated run-off to enter drains.

6. ACCIDENTAL RELEASE MEASURES:

Emergency Procedures:	Spills may be slippery and should be cleaned up immediately. Isolate area. Keep unnecessary and unprotected personnel from entering the area. If contamination of sewers or waterways has occurred advise local emergency services. This is a water based product, if spilt on electrical equipment the product will cause short-circuits.
Personal Precautions and Protective Equipment:	Refer to SDS section 7 for handling and precautionary measures. Refer to SDS section 8 for additional information, personal protection equipment and clothing to prevent exposure.
Environmental Precautions:	Contain - prevent from entering into soil, ditches, sewers, waterways and/or groundwater.
Methods and Materials for Containment and Clean up:	If possible contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable properly labelled sealable container for disposal. Do not dilute but contain. Dispose of the waste according to the applicable local and national regulations. If contamination of sewers or waterways has occurred advise local emergency services.



7. HANDLING & STORAGE:

Precautions for safe handling and storage:

- Handling:** Keep out of reach of children.
Avoid skin and eye contact.
Avoid inhalation of vapours, mist and spray.
Use only in a well-ventilated area and prevent build-up of vapours, mists or spray in the work area.
After work, remove protective clothing and equipment, wash hands, arms face and exposed skin before eating, drinking, smoking, chewing gum or using the toilet.
Clean up spilled material immediately and wash clothing, equipment and work area after use.
- Storage:** Keep out of reach of children.
Store in a tightly closed original container in a cool, dry, well-ventilated area out of direct sunlight.
Store away from children, animals, food, feedstuffs, drink containers, fertilisers and seeds.
Store away from incompatible materials.
Keep containers tightly closed when not in use and check regularly for leaks.
Ensure that storage conditions comply with applicable local and national regulations.
Protect from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

- Occupational Exposure Limits:** No ADE, PDE or TEL values are set by EPA for this substance at this time. No WES values are set by EPA for this substance at this time.
- Exposure Guidelines:** The applicable WES for constituent⁽¹⁾:
Potassium Hydroxide (CAS 1310-58-3): WES-TWA (Ceiling)* = 2 mg/m³ air ⁽¹⁾.
TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week. * Ceiling is a concentration which should not be exceeded during any part of the working day.
- Appropriate Engineering Controls:** Use with good general ventilation. If mists or vapours are produced, local exhaust ventilation should be used.
- Personal Protective Equipment:** **Respiratory Protection:**
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapour/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to the Australian/New Zealand standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.
- Hand protection:**
Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protection gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves – Selection, use and maintenance.
- Body protection:**
Suitable protective workwear, e.g. cotton overalls buttoned to the neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.
- Eye protection:**
Safety glasses with side shields, chemical goggles or full face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform to AS/NZS 1337: Eye Protectors for Industrial Applications.



9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance:	Dark brown liquid.
Odour:	Seaside like odour.
pH:	10.5 – 11.4.
Vapour Pressure (20°C):	Not available.
Specific Gravity:	1.0 – 1.1 kg/litre @ 25°C
Boiling Point (°C):	Not available.
Flammability:	Non-flammable.
Flash point (°C):	Not available.
Solubility in water:	Soluble in water.
Upper and Lower Explosive Limits:	Not available.
Auto Ignition Temperature (°C):	Not available.

10. STABILITY and REACTIVITY:

Chemical Stability:	Stable under normal conditions of storage and handling.
Conditions to avoid:	Extremes of temperature and direct sunlight.
Incompatible materials:	Not available.
Hazardous decomposition products:	Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION:

Potential Health Effects: This section includes possible adverse effects, which could occur if the product is not handled in the recommended manner.

Eye Contact:	May be irritating to eyes. The symptoms may include redness, itching and tearing.
Skin Contact:	May be irritating to skin. The symptoms may include redness, itching and swelling. Not expected to be a skin sensitiser.
Ingestion:	Ingestion of this product may irritate the gastric tract causing nausea and vomiting.
Inhalation:	Inhalation of product vapours may cause irritation of the nose, throat and respiratory system. Not expected to be a respiratory sensitiser.
Carcinogenicity:	Not considered to be a carcinogenic hazard.
Germ Cell Mutagenicity:	Not considered to be a mutagenic hazard.
Reproductive Toxicity:	Not considered to be toxic to reproduction.
Aspiration:	Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION:

Ecotoxicity:	No ecological data available for this material. Soluble in water. Do not allow into waterways. Avoid contamination of natural waterways and fishponds. Do not allow product into aquatic environments, drains, sewers, waterways and/or groundwater.
Persistence and degradability:	Not available.



13. DISPOSAL CONSIDERATIONS:

Disposal methods: Product disposal - Dispose of this product by using in accordance with the product label directions. Do not dispose of this product or equipment cleaning water directly into the sewerage system, into drains or watercourses or dispose where ground or surface water may be affected.

This product can be disposed of through a licensed public or commercial waste collection service. In this specific case the product is water based / water-soluble and therefore can be sent through a waste water treatment plant and after treatment can be discharged into the environment through the sewerage or drainage systems as authorised.

Refer to SDS section 7 for handling and precautionary measures.

Refer to SDS section 8 for additional information and personal protection equipment to prevent contamination of skin, eyes and personal clothing.

Container disposal – Packaging can be disposed of through a licensed public or commercial waste collection service.

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local area regulatory authorities following all applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION:

This product is Not classified as a Dangerous Goods for transport in NZ; NZS 5433:2012.

15. REGULATORY INFORMATION:

This product is Not classified as hazardous according to criteria in the HS (Minimum Degree of Hazard) Regulations 2001.

16. OTHER INFORMATION:

Date of preparation of SDS: March 2021.

Abbreviations in SDS:

- ADE:** Acceptable daily exposure values set by EPA.
- EPA:** The Environmental Protection Authority of New Zealand.
- PDE:** Potential daily exposure values set by EPA.
- pH:** A measurement of how acidic or alkaline a material is using a scale of 1 -14. pH 1 is strongly acidic, pH 14 is strongly alkaline.
- TEL:** Tolerable exposure limit set by EPA.
- WES:** Work place exposure standard set by EPA or NZ Dept. of Labour Health & Safety.

References:

- (1) Workplace Exposure and Biological Exposure Indices, 8th Edition. Effective from June 2016, Worksafe NZ.

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