Material Safety Data Sheet

Waikaitu NZBioAmino 9% Nitrogen

Section 1. Product and company identification

Waikaitu NZBioAmino 9% Nitrogen Organic Seaweed Extract

MSDS authored by Waikaitu, Limited Address: 28 Oxford St. Richmond, Nelson 7020

In Case of Emergency call: 03 970 0302

Section 2. Hazards Identification

The manufacturer has stated that this substance is NON hazardous according to the HSNO (Minimum Degrees of Hazard) Regulations 2001

Section 3. Composition / Information on Ingredients

No hazardous product as specified in Directive 67/548/EEC.

Preparation: Liquid hydrolysate of amino acid. Description: Aqueous solution of amino acid hydrolysate. Amino acids and peptides obtained by enzymatic hydrolysis. Mixed with Seaweed extract.

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes Rinse cautiously with water for several minutes. If eye irritation occurs: Get medical advice.

If on Skin Wash with plenty of soap and water. If skin irritation occurs: get medical advice.

If Swallowed Immediately rinse the mouth with water, then drink a lot of water. Consult the doctor in case of persistent trouble. Get medical assistance if you feel unwell.

If Inhaled Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

Section 5. Fire Fighting Measures

Hazard Type - Non Flammable

Hazards from decomposition products - The material itself is harmless and hardly inflammable. Ambient fire may liberate hazardous vapours. If larger quantities of the product are on fire, the formation of nitrous gases and ammonia is possible. Suitable Extinguishing media - Water, carbon dioxide, dry extinguishing media, foam.

Precautions for firefighters and special protective clothing - Do not stay in dangerous zone without suitable chemical protecting clothes and self-contained breathing apparatus. Contain escaping vapours with water.

HAZCHEM CODE - None allocated

Section 6. Accidental Release Measures

Wear suitable protecting clothes. Avoid product contact and formation of vapours/aerosols. Do not inhale vapours/aerosols. In event of vapours/aerosols wear respiratory protection, safety glasses and gloves. Take up with absorption media. Disposal of contaminated material as waste according to section 13.

Ensure that the product does not reach the ground-water, water bodies or the drainage system.

Section 7. Handling and Storage

Handling Wear protective clothing. · Avoid product contact and formation of vapours/aerosols. · Do not inhale vapours/aerosols. · In event of vapours/aerosols wear respiratory protection, safety glasses and gloves. · Remove soiled and soaked clothes and wash hands and face after work Storage · Protect the product from impurity or drying up. · Temperature in stockrooms not below -5°C and above +40°C · Do not store in metal containers (corrosion risk). · Keep containers tightly closed. · Do not store together with food and luxury food, beverage and animal feed. · It is recommended to design stockrooms so that the product is well-protected from weather factors, solar radiation, heat up, dry up and impurities.

Product Name: NZBioAmino Issued by: Waikaitu Ltd. Tel: 64 3 970 0302 Page 2

Section 8 Exposure Controls / Personal Protection

Engineering Controls - Not applicable. Ensure adequate ventilation is available to reduce exposure Personal Protection

- Eyes: Safety goggles.
- Skin: Closed working clothes.
- Hand: Rubber or plastic gloves.
- · Respiratory: Not required. Respiratory protection necessary at vapours/aerosol and wet fog formation.
- Industrial Hygiene Do not eat and drink at work. Remove immediately soiled and soaked clothes. Wash hands and face after work.

Section 9 Physical and Chemical Properties

- Appearance Aqueous solution Colour Brown
- Odour Product specific
- pH(original state): Approx 4.5
- pH at 16 g/l H2O and 20° C: Approx 4.5
- Change in physical state: > 100C evaporation of water
- Self ignition The product is not spontaneously inflammable
- Density (at 200C) Approx. 1.25 g/cm3
- Solubility in water (at 20°C): Fully water soluble in each ratio

Section 10. Stability and Reactivity

Stability of Substance - The product is stable under normal conditions.

Conditions to Avoid - Direct solar radiation, heat up and dry up. Temperatures above +40° C.

Incompatible Materials - Strong alkaline materials, strong acid materials and strong oxidizer.

Hazardous Decomposition Products - No decomposition if correctly used. Reacts with alkalis setting ammonia free.

Thermic Decomposition - Nitrous gases and ammonia.

Section 11 Toxicological Information

Toxicological tests

• Acute toxicity: Oral for this product = LD50 (oral): =>5000mg/kg = Non Hazardous

Further toxicological information

- After inhalation of aerosols: Slight irritations of the mucous membranes and coughing.
- After skin contact: Slight irritations.
- After eye contact: Slight irritations.
- After swallowing: Nausea and vomiting. After uptake of large quantities: Diarrhoea.

Section 12. Ecotoxicological Information

This product is not known to be hazardous to the environment.

Depending on the concentration, phosphorus and/or nitrogen compounds may contribute to the eutrophication of drinking-water supplies.

Section 13. Disposal Considerations

Dispose of according to Local Regulations.

Section 14 Transport Information

This product is not classified as a Dangerous Good for transport in NZ; NZS 5433:2012

Section 15 Regulatory Information

The manufacturer has stated that this substance is NON hazardous according to the HSNO (Minimum Degrees of Hazard) Regulations 2001

Section 16 Other Information

Disclaimer: This document has been issued by Waikaitu Ltd. and serves as their Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to Waikaitu Ltd. or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Waikaitu Ltd have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Waikaitu Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS. The information herein is given in good faith, but no warranty, express or implied is made. Please contact the Waikaitu Ltd, if further information is required.

Issue Date: 6 June 2016 Review Date: 6 June 2022