

SAFETY DATA SHEET

Program Cat. No: Not available

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Issued by Pacific Biotechnologies Ltd.

1. IDENTIFICATION

Product name: Plant Juice

Synonyms: Plant Juice Liquid Seaweed Extract

Recommended use of the chemical and restrictions on use: Soil revitaliser and plant biostimulant

Product code: Not available.

Company name: Pacific Biotechnologies Ltd.

Address: 8/663 Victoria Street, Abbotsford, VIC, 3067, Australia

Phone number: (+61) 394 158 711

Emergency phone number: 1800 345 678

2. HAZARD IDENTIFICATION

GHS classification: Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia. Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition) and the New Zealand NZS5433 Transport of Dangerous Goods on Land.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical characterization: Mixture.

Description: No reportable hazardous substances or complex substances.

Chemical entity	CAS	Proportion
Potassium hydroxide (KOH)	1310-58-3	<0.5%
Ingredients determined not to be hazardous (green seaweed)		Balance

4. FIRST AID MEASURES

Inhalation: If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

Ingestion: If swallowed, do not induce vomiting. Wash out mouth thoroughly with water. Give a glass of water or milk. Do not give anything by mouth to an unconscious person. If symptoms develop and/or persist seek medical attention.

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Skin contact: In case of skin contact, remove contaminated clothing and wash affected areas thoroughly with water and soap. If symptoms develop and/or persist seek medical attention.

Eye contact: In case of eye contact, hold eyelids apart and cautiously rinse the eyes with water for several minutes. Remove contact lenses. Continue rinsing for several minutes. If symptoms develop and/or persist seek medical attention.

First aid facilities: Wear safety shoes, overalls, gloves, safety glasses. Eyewash and normal washroom facilities.

Advice to doctor: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use fire extinguishing methods suitable to surrounding conditions.

Hazards for combustion products: Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

Specific hazards arising from the chemical: This product is non-combustible. However, following evaporation of aqueous component under fire conditions, the non-aqueous component may decompose and/or burn.

Precautions in connection with fire: Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment and clothing to prevent exposure. As a water based product, if spilt on electrical equipment the product will cause short-circuits. Increase ventilation.

Environmental precautions: If possible, contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. Do not dilute material but contain. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs, inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling: Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only in a well ventilated area. Keep containers sealed when not in use. Food beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other

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protection equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for safe storage: Store in a cool, dry, well-ventilated area, out of direct sunlight. Protect from freezing. Store in a suitable, labelled container. Keep container tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational exposure limit values: No exposure standards have been established for this material.

However, the available exposure limits for ingredients are listed below:

Potassium hydroxide

TWA: 2 mg/m³ (peak)

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.

Peak limitation: A ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

Biological limit values: No biological limits allocated.

Appropriate engineering controls: Use with good ventilation. If mists or vapours are produced, local exhaust ventilation should be used.

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 Australian 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.

Eye protection: Safety glasses with side shields, chemical goggles or full face shields 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 Australian/ New Zealand Standard AS/NZS 1337 – Eye Protectors for Industrial Applications.

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 protective 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 work-wear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Liquid	Appearance	Dark green liquid
Colour	Dark green colour	Odour	Seaweed like odour
Decomposition temperature	Not available	Melting point	Not available
Boiling point	Not available	Solubility in water	Completely soluble
Specific gravity	1.025 (22°C)	pH	11.5 - 12.8
Vapour pressure	Not available	Vapour density (Air=1)	Not available
Evaporation rate	Not available	Odour threshold	Not available
Viscosity	Not available	Partition coefficient	Not available
Flash point	Not available	Flammability	Non flammable
Auto-ignition temperature	Not available	Flammable limits – lower	Not available
Flammable limits - upper	Not available	Explosion properties	Not available
Oxidising properties	Not available	Molecular weight	Not available

10. STABILITY AND REACTIVITY

Reactivity: Reacts with incompatible materials.

Chemical stability: Stable at ambient temperature and under normal conditions of storage and handling.

Conditions to avoid: Extremes of temperature and exposure to direct sunlight.

Incompatible materials: Strong acids and strong oxidising agents may cause degradation.

Hazardous decomposition products: Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon monoxide, carbon dioxide and oxides of nitrogen.

Possibility of hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

Toxicity

Ingestion: Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation: Inhalation of this product may cause irritation of the nose, throat and respiratory system.

Skin: May be irritating to skin. The symptoms may include redness, itching and swelling.

Eye: May cause irritation and redness.

Respiratory sensitisation: Not expected to be a respiratory sensitiser.

Skin sensitisation: Not expected to be a skin sensitiser.

Germ cell mutagenicity: Not considered to be a mutagenic hazard.

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Carcinogenicity: Not considered to be a carcinogenic hazard.

Reproductive toxicity: Not considered to be toxic to reproduction.

STOT-single exposure: Not expected to cause toxicity to a specific target organ.

STOT-repeated exposure: Not expected to cause toxicity to a specific target organ.

Aspiration hazard: Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No ecological data available.

Persistence and degradability: This product is biodegradable.

Mobility: Soluble in water. Readily absorbed into soil.

Bioaccumulative potential: No accumulation potential.

Other adverse effects: Not available.

Environmental protection: Prevent this material entering waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations: Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international regulations.

14. TRANSPORT INFORMATION

Transport information: Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

U.N. number: Not regulated.

U.N. proper shipping name: Not regulated.

Transport hazard class(es): None allocated.

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Special precautions for user: Not available.

IMDG marine pollutant: No.

Transport in bulk: Not available.

15. REGULATORY INFORMATION

Regulatory information: Not classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations, Australia. Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Australian Inventory of Chemical Substances: This chemical is not found in AICS.

Poisons Schedule: Not scheduled.

16. OTHER INFORMATION

Date of preparation or last revision of SDS: SDS created: October 2019

References: Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work, Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of industrial Hygienists (ACGIH).

Globally Harmonised System of classification and labelling of chemicals.

END OF SDS