

Essential Plus 1-0-1

Section 1 -- IDENTIFICATION

1.1. Product Identifier

Product name: Essential Plus 1-0-1
Synonym: Humic Acid Solution (Derived from Leonardite)

1.2. Recommended Use / Restrictions

Identified Uses: Soil amendment, biostimulant for plants.
Restrictions: N/A

1.3. Supplier Details

Company: Fernland Agencies Pty Ltd
 31-35 Paulger Flat Road
 Yandina Qld 4561 AU
 +61754548800 (7:30 am - 4:30 pm AEST Mon - Fri)
 sales@fernland.com.au

1.4. Emergency Telephone Number

Emergency Telephone: 13 11 26 (Auatsrlian Poisons Information Hotline)

Section 2 -- HAZARD(S) IDENTIFICATION

2.1. Classification of substance or mixture

Physical Hazards: Not Classified
Health Hazards: Eye Irritation 2B - H320
 Skin Irrit. 3 - H316
Environmental Hazards: Not Classified

2.2. Label Elements

Pictogram:



Signal Word:

WARNING!

Hazard Statements:

H320 Causes eye irritation (burning)
 H316 Causes mild skin irritation (May cause a reaction to individuals allergic to fish)

Precautionary Statements:

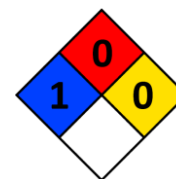
P264 Wash hands/face/exposed skin thoroughly after handling
 P302+P352 IF ON SKIN: Wash with plenty of water
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention
 P337+P313 If eye irritation persists: Get medical advice/attention
 P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3. Other Hazards

This product does not contain any substance classified as PBT or vPvB

NFPA Ratings

| | | |
|-------------------------|------------|--------------------|
| Health: | 1 | Slightly hazardous |
| Flammability: | 0 | Will not burn |
| Reactivity: | 0 | Stable |
| Specific Hazard: | N/A | Not applicable |



HMIS Ratings

| | | |
|------------------------|----------|-----------------|
| Health: | 0 | Minimal hazard |
| Flammability: | 0 | Minimal hazard |
| Reactivity: | 0 | Minimal hazard |
| Personal (PPE): | B | Goggles, Gloves |

| | | |
|----------------------------|----------------|----------|
| Health | <i>minimal</i> | 0 |
| Flammability | <i>minimal</i> | 0 |
| Physical Hazard | <i>minimal</i> | 0 |
| Personal Protection | | B |

Section 3 -- COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| Chemical Name | CAS Registry No. | REACH No. | ENECS No. | Classification |
|-------------------------------------|------------------|------------------|-----------|--|
| Potassium humate: | 68514-28-3 | - | 271-030-1 | <u>GHS</u> Not Classified |
| Kelp Extract (Ascophyllum nodosum): | 69235-69-4 | - | - | Not Classified |
| Yucca schidigera: | 223749-05-1 | - | - | <u>GHS-US</u> Eye Irrit. 2B - H320 Skin Irrit. 3 - H316 |
| Fish hydrolysate: | - | - | - | <u>GHS-US</u> Skin Irrit. 3 H316 Eye Irrit. 2B H320 Sensit. Skin 1 H317 |
| Plant extracts: | 9010-10-0 | - | - | Not Classified |
| Iron Sulfate: | 7782-63-0 | - | - | <u>GHS-US</u> Acute Tox., Oral 4 - H303 Skin Irrit. 2 - H316 Eye Irrit. 2B - H320 |
| Magnesium sulfate: | 13446-18-9 | 01-2119491164-38 | 233-826-7 | Not Classified |
| Saccharides: | 6363-53-7 | - | - | Not Classified |

Section 4 -- FIRST-AID MEASURES

4.1. Description of first-aid measures

Inhalation:

Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if symptoms are severe or persist.

Ingestion:

Never give anything by mouth to an unconscious person. Do not induce vomiting, unless instructed by a healthcare professional. Rinse mouth thoroughly with water. Get medical attention if any symptoms develop.

Skin Contact:

Remove affected person from source of contamination. Take off immediately all contaminated clothing and wash it before reuse. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

4.2. Most important symptoms and effect, both acute and delayed

Inhalation: May cause respiratory irritation. There may be irritation of the throat with a feeling of tightness in the chest.

Ingestion: Ingestion may cause nausea, vomiting and stomach and digestive irritation. There may be soreness and redness of the mouth and throat.

Skin Contact: Skin contact may cause redness and irritation. Prolonged or repeated skin contact can result in the development of allergy-like skin reactions (e.g., dermatitis, rashes)

Eye Contact: There may be irritation and redness. Profuse watering of the eyes.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for doctor: No specific recommendations. If in doubt, get medical attention promptly. Treatment may vary with the condition of victim and specifics of incident.

Specific treatments: Eye bathing equipment should be available on the premises.

Section 5 -- FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: The product is not flammable. Use fire-extinguishing media suitable for the surrounding environment. The substance itself does not burn.

Unsuitable extinguishing media: N/A

Environmental Hazards:

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: N/A

5.3. Advice for firefighters

Protective actions during firefighting: No specific firefighting precautions known. Irritant, non-flammable, water soluble. Do not inhale gases created by fire. Do not allow run-off from firefighting to enter drains or watercourses.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) eye protection and appropriate protective clothing.

Section 6 -- ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions: Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3 Methods and material for containment and cleanup

Methods for cleaning up:

Stop leak if possible without risk. Contain and absorb spillage with sand, earth or other noncombustible material. Transfer to a container for disposal. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4 Reference to other sections

Reference to other sections:

For personal protection, see Section 8. For waste disposal, see Section 13.

Section 7 -- HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Using precautions:

Provide adequate ventilation. Avoid spilling. Avoid contact with skin and eyes. Wash hands thoroughly after handling.

Advice on general occupational hygiene:

Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage precautions:

Store in tightly closed original container in a dry, cool and well-ventilated place. Store at temperatures above 5°C. Keep away from heat and direct sunlight. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Section 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control Parameters

Occupational exposure limits

| Material | Type | Value | Source |
|-------------------------------------|--|--|--|
| Yucca schidigera (CAS 223749-05-1): | N/A | N/A | Not listed in IFA database |
| Potassium humate (CAS 68514-28-3): | N/A | N/A | N/A |
| Iron sulfate (CAS 7782-63-0): | No biological exposure limits noted for ingredient(s). | 1 mg/m ³ | US. ACGIH Threshold Limit Values US. NIOSH: Pocket Guide to Chemical Hazards Material |
| Fish hydrolysate (CAS N/A): | N/A | N/A | Not listed |
| Plant extracts (CAS 69235-69-4): | N/A | N/A | Not listed |
| Magnesium sulfate (CAS 13446-18-9): | Oral Dermal Inhalation | N/A 20.8 mg/kg bw/day 36.7 mg/m ³ | DNEL (Derived no effect level) OSHA |
| Kelp Extract (CAS 69235-69-4): | N/A | N/A | N/A |

8.2. Exposure controls

Protective equipment

General information:

Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

Appropriate engineering controls:

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

Eye / face protection: Use chemical splash-type goggles. Face shield.

Hand protection: For hand protection, wear approved gloves made of nitrile, PVC, or neoprene. Thoroughly rinse the outside of gloves with water prior to removal. Inspect regularly for leaks.

Other skin and body protection: For body protection wear suitable protective clothing.

Hygiene measures: Avoid breathing vapors, mist or gas. Clean water should be available for washing in case of eye or skin contamination.

Respiratory protection: If concentrations in excess of 10 ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA) or other approved air-supplied respirator (ASR) equipment (e.g., a full-face airline respirator (ALR)).

Environmental exposure controls: Eye bathing equipment should be available on the premises. Provide quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

Equipment:

HMIS Letter:

B



Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | | | |
|-----------------------------------|-------------------------------|-----------------------------|-----------------------|
| Physical State: | Liquid | Evaporation Rate: | Same as water |
| Color | Black/Brown | Boiling Point: | About 210°F / 99°C |
| Odor: | Mild Earthy Odor | Freezing Point: | <32°F / 0°C |
| Weight per Gallon / Liter: | 8.99# @ 70°F / 1.07 Kg @ 21°C | Viscosity: | 20 cps @ 21 Degrees C |
| Storage Life at 70F: | >3 years | Flash Point/Method: | Noncombustible |
| pH – 21C: | 5.5 | Vapor Pressure: | Equivalent to water |
| Solubility: | Soluble | Storage Temperature: | Above 32°F / 0°C |

Section 10 -- STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: Stable

10.2. Chemical Stability

Stability: Stable under normal recommended storage conditions.

10.3. Possibility of Hazardous Reactions

Possibility of hazardous reactions: N/E

10.4 Conditions to Avoid

Conditions to avoid: Exposure to extreme temperatures and incompatible materials

10.5 Incompatible Materials

Materials to avoid: N/E

10.6 Hazardous Decomposition Products

Hazardous decomposition products: N/E

Section 11 -- TOXICOLOGICAL INFORMATION
11.1. Information on Toxicological Effects

| | |
|---------------------------------------|---|
| Toxicological effects: | N/E. No data available. |
| Over Exposure, Acute: | Liquid contact may cause slight eye irritation and repeated skin exposure may cause skin irritation. |
| Over Exposure, Chronic: | N/E |
| Routes of Exposure: | Not expected to be harmful under normal conditions of use, however if allowed to become airborne, may cause irritation of nose throat and lungs. May cause irritation from prolonged or repeated contact. |
| Acute, Dermal LD₅₀: | N/E |
| Acute, Oral LD₅₀: | N/E |
| Effects to eyes: | No corneal or iridal effects were noted at dose of 0.1 ml, rabbits. |
| Effects to Ingestion | Non-toxic and non-pathogenic |
| Effects to skin: | Moderate irritation, reversible within 7 days |
| Carcinogenicity Date: | N/E |

11.2. Toxicological information on main components of the mixture:

N/E. No data available.

Section 12 -- ECOLOGICAL INFORMATION
Ecotoxicity:
12.1. Toxicity

N/A

12.2. Persistence and degradability
Persistence and Degradability:

N/E

12.3. Bioaccumulative potential
Bioaccumulative potential:

Expected to desorb fairly rapidly from soil and not bioaccumulate.

Partition coefficient:
12.4. Mobility in Soil
Mobility:

This product is biodegradable in soil by microbial activity

12.5. Results of PBT and vPvB Assessment

Not listed in EIS PBT List.

12.6. Other Adverse Effects
Other adverse effects:

N/E

Section 13 -- DISPOSAL CONSIDERATIONS
13.1. Waste Treatment Methods

Disposal methods: Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product, residue and/or container.

The information offered in Section 13 is for the product as shipped.

Section 14 -- TRANSPORTATION INFORMATION
General

Product is not flammable, not corrosive, not explosive and not radioactive.

14.1. UN Number

N/A

- 14.2. UN Proper Shipping Name N/A
- 14.3. Transport Hazard Class(es) N/A
- 14.4. Packing Group N/A
- 14.5. Environmental Hazards N/A
- 14.6. Special Precautions for User N/A
- 14.7. Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code
N/A

Section 15 -- REGULATORY INFORMATION

15.1. Safety, health and Environmental Regulations / Legislation Specific for the Substance or Mixture

EU legislation: This product is labeled in accordance EU directives.

15.2. Chemical Safety Assessment

See Section 2.3 for NFPA & HMIS Ratings

Section 16 - OTHER INFORMATION

REVISED DATE: 16 May 2019

Other Precautions:

Read entire label before using

Abbreviations / Acronyms:

| | | | |
|---------|--|-----|----------------|
| N/E | Not Established | N/A | Not applicable |
| ACGIH | American Conference of Governmental Industrial Hygienists | | |
| TLV | Threshold Limit Values | | |
| PEL | Permissible Exposure Limit | | |
| REL | Recommended Exposure Limit | | |
| OSHA | Occupational Safety and Health Administration | | |
| NIOSH | National Institute for Occupational Safety and Health | | |
| TWA | Time Weighted Average over 8 hours of work | | |
| TLV | Threshold Limit Value over 8 hours of work | | |
| REL | Recommended Exposure Limit | | |
| PEL | Permissible Exposure Limit | | |
| STEL | Short Term Exposure Limit during x minutes | | |
| IDLH | Immediately Dangerous to Life or Health | | |
| TSCA | Toxic substance Control Act (United States) | | |
| DSL | Domestic Substance List (Canada) | | |
| EINECS | European Inventory of Existing Commercial Chemical Substances (Europe) | | |
| ELINCS | European List of Notified Chemical Substances (Europe) | | |
| ENCS | Existing Chemical Substances | | |
| IECSC | Inventory of Existing Chemical Substances | | |
| KECL | Korea Existing Chemicals Inventory | | |
| PICCS | Philippines Inventory of Chemical and Chemical Substances | | |
| AICS | Australian Inventory of Chemical Substances | | |
| NZIoC | New Zealand Inventory of Chemicals | | |
| HMIS | Hazardous Material Identification System (American Coatings Association) | | |
| NFPA | National Fire Protection Association | | |
| PBT | Persistent Bioaccumulative and Toxic | | |
| vPvB | Very Persistent and very Bioaccumulative | | |
| STOT SE | Specific Target Organ Toxicity; Single Exposure | | |
| STOT RE | Specific Target Organ Toxicity; Repeated Exposure | | |

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