

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: Growth Products, Ltd.
 80 Lafayette Avenue
 White Plains, NY 10603-1603 USA
 +011 914-428-1316 (9 am - 5 pm EST Mon - Fri)
 questions@growthproducts.com

1.4. Emergency Telephone Number

Emergency Telephone: +011 914-428-1316 (9 am - 5 pm EST Mon - Fri)

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



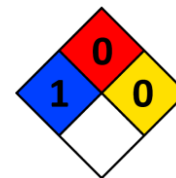
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NFPA Ratings

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	minimal	0
Flammability	minimal	0
Physical Hazard	minimal	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
Kelp Extract (Ecklonia maxima):	-	-	-	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.
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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 & 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) 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** Stable
- 10.2. **Chemical Stability:** Stable under normal recommended storage conditions.
- 10.3. **Possibility of Hazardous Reactions:** N/E
- 10.4. **Conditions to Avoid** Exposure to extreme temperatures and incompatible materials
- 10.5. **Incompatible Materials**
- Materials to avoid:** N/E
- 10.6. **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, 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, may cause allergy-like skin reactions
- Carcinogenicity Date:** N/E
- 11.2. **Toxological 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** N/E
- 12.3. **Bioaccumulative potential** Expected to desorb fairly rapidly from soil and not bioaccumulate.
- 12.4. **Mobility in Soil** 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:** 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 a non-regulated material; not flammable, not corrosive, not explosive and not radioactive.
In accordance with DOT / TDG / ADR / RID / ADNR / IMDG / ICAO / IATA

Regulatory Information	14.1 UN Number	14.2 Proper Shipping Name	14.3 Class(es)	14.1 Packing Group	14.5 Environmental Hazard	14.6 Special Precautions For User	Additional Information
ADR / RID Class	Not regulated for transportation	Not regulated	Not regulated	Not regulated	Not classified as marine pollutant	N/A	N/A
ADNR Class	Not regulated for transportation	Not regulated	Not regulated	Not regulated	Not classified as marine pollutant	N/A	N/A
IMDG Class	Not regulated for transportation	Not regulated	Not regulated	Not regulated	Not classified as marine pollutant	N/A	N/A
IATA class	Not regulated for transportation	Not regulated	Not regulated	Not regulated	Not classified as marine pollutant	N/A	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. The Dangerous Substance Directive (Directive (67/548/EEC, "DSD"), The Dangerous Preparations Directive (Directive 1999/45/EC, "DPD") and the new regulations classification, labeling and packaging of substances and mixtures, Regulation (EC) No 1272/2008 of the European Parliament and the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 453/2010 of May 2010.

15.2. Chemical Safety Assessment See Section 2.3 for NFPA & HMIS Ratings

Section 16 - OTHER INFORMATION

REVISED DATE: 22 May 2017

Other Precautions:

Abbreviations / Acronyms:

Read entire label before using

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		



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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
GER-MAK	Germany Maximum Workplace Concentration
DOT	Department of Transportation
TDG	Transportation of Dangerous Goods (Canada)
ADR	European Agreement Concerning the International Carriage of Dangerous Goods by Road
RID	Regulations Concerning the International Carriage of Dangerous Goods by Rail (EU)
ADNR	Regulation for the Carriage of Dangerous Substances on Waterways (EU)
IMDG	International Maritime Dangerous Goods
ICAO	International Civil Aviation Organization
IATA	International Air Transport Association

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