

SAFETY DATA SHEET

Soilmate Amplify

Last updated: 12/07/2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Soil Mate Amplify - Seaweed Biostimulant + Carbon

Product Type: Fertiliser and Bio-Stimulant

Recommended Use: Horticultural soil nutrient, fertiliser, plant growth stimulant and soil conditioner.

Advised Against: It is not intended for human consumption and application on solid oxidizing fertilizer should be limited. Mixing the substance with Ca or other divalent cations or decreasing its pH may cause it to form sludge.

Manufacturer/Supplier:

Greenmate AG Pty Ltd
Greenmate Agriculture
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Cranbourne South VIC 3977
1300 375 078
info@greenmate.com.au
www.greenmate.com.au/

Emergency Phone (For emergencies only; DO NOT contact for general advice):

Chemcall: 1800-127406
Poisons Information Centre: 13 11 26
EPA for large scale spills: 1300 372 842

2. HAZARDS IDENTIFICATION

Classification Of The Substance Or Mixture:

Acute Tox. 5 H303 May be harmful if swallowed.
Eye Irritant Category 2.
Skin Irritant Category 2

Label Elements:

Signal Word: Warning

Hazards:

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H303 May be harmful if swallowed.

Precautionary Statements:

P264 Wash thoroughly after handling.
P280 Wear protective gloves, eye protection, and face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical attention.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical attention.
P362 Take off contaminated clothing and wash before reuse.
IF SWALLOWED: Call a doctor if you feel unwell.
May slightly irritate skin, may irritate eyes and may irritate the intestinal tract.
Release into natural water systems in large quantities may harm aquatic life.
May act as a slight irritant to the skin or lungs or a mild allergen. Prolonged skin contact could result in dermatitis in sensitive individuals.

Other Hazards:

Combining with solid oxidizing fertilizers may increase the hazardousness of the fertilizer and result in its classification as explosive material. Once material has dried and turned into powder, treat the powder like coal dust. It can ignite and burn. Fish oil can be removed from normal skin by washing with soap and water. Hot oil could result in burns to the contacted part. In that event, follow normal first aid procedures for treating burns.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity	Formula	CAS Number
Potassium Fulvic Acid	No Data Available	479-66-3
K ₂ O (Potassium Oxide)	No Data Available	
Water	No Data Available	
K-Humate	No Data Available	68514-28-3
Humic Acid Solution	No Data Available	Proprietary
Potassium Hydroxide	No Data Available	1310-58-3
Wild Harvest 100% Australian Seaweed	No Data Available	
Nitrogen	No Data Available	

4. FIRST AID MEASURES

General information: Product is alkaline and contains small amounts of KOH. No special measures required.

Eye: Immediately flush eyes with plenty of water for 15 minutes while holding the eyelids open. Remove contact lenses, if present and easy to do. Then consult a doctor. In all cases of eye contamination, it is a sensible precaution to seek medical advice.

Skin: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water for at least 15 minutes. Get medical attention if irritation occurs and persists. Launder clothing before re-use.

Ingestion: Do not induce vomiting unless directed to do so by a medical professional. Rinse mouth with water and give one glass of water to drink. Get medical attention if symptoms develop.

Inhalation: Remove victim from exposure area to supply fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical advice if effects persist.

After swallowing: If symptoms persist consult doctor. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Information for doctor: Treat supportive and symptomatically. Contains potassium hydroxide.

Most important Symptoms: May cause moderate eye and skin irritation. Inhalation of mists may cause mucous membrane and respiratory irritation. The product is alkaline and may irritate gastro-intestinal tract, eyes and skin. Skin abrasions and sores. Inhalation of vapors or aerosols may aggravate asthma.

Indication of immediate medical attention/special treatment: Immediate medical attention should not be required.

5. FIRE FIGHTING MEASURES

General Measures: Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.

Flammability Conditions: Negligible fire hazard when exposed to heat or flame.

Suitable Extinguishing Media: In case of fire, appropriate extinguishing media include dry powder and carbon dioxide.

Specific Hazards arising from the chemical: None known. Hazardous decomposition materials include oxides of carbon and unknown materials. Potassium hydroxide may react with metals to liberate flammable hydrogen gas. Aqueous solutions may cause surfaces to be extremely slippery and cause a slip hazard. If liquid boils dry, harmful gasses will be produced and resultant dry material may be more combustible. Substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

Advice for firefighters: Once boiled dry material may burn as easily as charcoal and may cause dust explosions. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

Protective equipment: Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure: Avoid accidents, clean up immediately. May be slippery when spilt. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment.

Clean Up Procedures: Small Spill: Use appropriate tools to put the spilled liquid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Spills from fats and oils produce slippery surfaces. Employ normal sanitation procedures to reduce risk. Absorb material on clay, sawdust, or other material.

Containment: Stop leak if safe to do so. Isolate the danger area.

Personal Precautions, Protective Equipment, and Emergency Procedures: Avoid contact with the eyes. Avoid prolonged skin contact. Wear appropriate protective clothing. Aqueous solutions may cause surfaces to be extremely slippery and cause a slip hazard. Wear protective equipment. Keep unprotected persons away. Personnel involved in the clean up should wear full protective clothing.

Environmental precautions: Prevent from spreading by e.g. damming in. DO NOT allow to enter sewers/ surface or ground water. Should not be released into the environment. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.

Methods and Materials for Containment and Cleaning Up: Contain and collect free liquid where possible. Neutralize small spills and residues and collect using an inert absorbent material and place in appropriate containers for disposal. Prevent spill from entering sewers and water courses. Report releases as required by local, state and federal authorities. Collect the product mechanically. Deposit in recipient for recuperation. When material spilled on soil, material likely to partially enter soil. In this case collect such soil also.

Evacuation Criteria: Evacuate all unnecessary personnel.

Waste Disposal Method: In accordance with all federal, state and local authorities.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Keep containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled. Do not reuse containers. Empty containers retain product residues which can be hazardous. Follow all SDS precautions when handling empty containers. Do not eat, drink or smoke in the work place. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas. Dust mask and gloves recommended during handling of product. Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Do not inhale product dust/fumes. Tanks should be vented. Empty tanks must be vented and purged with air before entry. Observe standard tank entry precautions.

Information about fire - and explosion protection: Protect from heat sources as drying up of this material may release dust that can form dust explosions. Dried material may also burn like charcoal. Keep ignition sources away - Do not smoke.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a cool, well-ventilated area away from heat, direct sunlight, moisture and incompatible materials. Incompatible with Iron based products, oxidising, acidic or alkaline materials. Have eye wash stations and safety shower nearby. Store in sealed containers. Store banded when reasonable. Store and transport in sealed containers below 40°C and above -10°C. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Keep out of reach of children. Do not store near food or feeds. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail. Exposure of material to air and water may cause deterioration in quality.

Specific end use(s): Agricultural

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

General: exposure standard for dust not otherwise specified is 10mg/m³ (for inspirable dust) and 3mg/m³ (for respirable dust). Keep away from foodstuffs, beverages and feed.

Additional information about design of technical facilities: Ensure eyewash stations and safety showers are close to the workstation location.

Control parameters: Ingredients with limit values that require monitoring at the workplace: Not required.

Engineering Controls: Protect from splashes. A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Respiratory Protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Hand Protection: Wear impervious gloves made of Neoprene, Nitrile, Butyl or PVC to prevent prolonged skin contact. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye Protection: Chemical safety glasses with side shields or goggles should be worn where splashing is possible. Other: Impervious coveralls, apron and boots as needed to avoid contact. Suitable washing facilities should be available in the work area. Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, do not wear contact lenses when handling

Body protection: Protective work clothing. Protective coveralls and safety footwear. Wear rubber if allergic.

Limitation and supervision of exposure into the environment: Avoid uncontrolled release into the environment by keeping material in sealed containers and by bunding where reasonable.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour: dark brown liquid	Physical State: Liquid
Odour Threshold: Not determined	Odour: Earthy
Initial Boiling Point/Range: 250°C	Vapor Density: Not determined
Vapor Pressure: Not determined.	Solubility In Water: Dispersible.
Evaporation Rate: Not determined	Relative Density: 1.004-1.07 (water=1)
pH: 8-11	Melting/Freezing Point: Not available.
Octanol/Water Coefficient: Not determined	VOC Content: Not determined.
Decomposition Temperature: Not determined	Solubility: Soluble in water.
Flammability (solid, gas): Not applicable	Viscosity: Not determined
Autoignition Temperature: Not applicable	Flashpoint: >300°F
UEL: Not applicable	Flammable Limits: LEL: Not applicable
Smoke Point: >320°F	Fire Point: >650°F

10. STABILITY AND REACTIVITY

Reactivity: Will coagulate with Iron (Fe). Reacts with calcium and divalent cations to form sludge. Reacts with acids to form a sludge

Chemical Stability: Stable under normal storage and handling conditions. May dry out and burn with extreme heating.

Possibility of Hazardous Reactions: Potassium hydroxide may react with metals to liberate flammable hydrogen gas. High temperatures may ignite. Reacts with strong acids and oxidising agents.

Conditions to Avoid: Avoid extreme heat or freezing temperatures. Avoid Incompatibles. Store away from metals and in original container. Avoid introducing pure oxygen

Incompatible Materials: Metals and strong oxidizing agents. Oxidizers, acids, Calcium ions and divalent cations. The following combustion products may be generated: toxic gases and trace volatile organic compounds. pure oxygen

Hazardous Decomposition Products: Oxides of carbon and unknown materials. Carbon monoxide and carbon dioxide

Additional information: When heated to dryness dust that may form may result in dust explosions. May burn like charcoal once dry. Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Eye: May cause moderate to severe irritation with pain, inflammation and tearing. Direct contact should be avoided to prevent physical damage.

Skin: May cause irritation. Prolonged exposure may cause irritation, inflammation, dermatitis, or defatting of skin tissues.

Ingestion: Ingestion may cause gastrointestinal irritation, mouth irritation, fever, loss of appetite, abdominal pain, nausea, vomiting and diarrhea.

Inhalation: May cause irritation of upper respiratory tract. Negligible at short term exposure to low levels dust, Long term inhaled high concentrations of dust can be irritating to the upper respiratory tract

Chronic: No data available

Sensitization: This material is not known to cause sensitization.

Carcinogenicity: None of the components present are listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA.

Germ Cell Mutagenicity: No data currently available.

Reproductive Toxicity: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Humic Acid Solution: No data available

Potassium Hydroxide: 96 hr LC50 Mosquito fish - 80mg/L

Persistence and Degradability: Not data available.

Bioaccumulative Potential: Not data available.

Mobility in Soil: Known to extract heavy metals

Other Adverse Effects: None known.

Aquatic toxicity: This material has a high pH and release of large volumes into aquatic systems may raise the pH resulting in harm to aquatic life.

Behaviour in environmental systems: Humic substances are some of the most recalcitrant forms of soil organic matter and may therefore biodegrade only slowly and may also accumulate in soil. As potassium humate is water soluble, it may be mobile and may leach through soil. The presence of clay material or calcium and other divalent cations, is likely to retard its movement.

General notes: Slightly hazardous for water. Avoid contaminating waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

General: Dispose in accordance with local and national environmental regulations.

Waste treatment methods:

Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system. If the fertilizer is not contaminated, recycle it. If contaminated, consult with specialists.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Wash thoroughly with water and soap prior to reuse. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility

Special Precautions: for Land Fill Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

DOT Hazardous Materials Description: Not regulated

IMDG Shipping Description: Not regulated

IATA Shipping Description: Not regulated

15. OTHER INFORMATION

This information is based on our present knowledge. This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Greenmate shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.