

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe South Africa

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: FLUME
Common Name: Soluble Seaweed Extract
Recommended Use: Hydroponic nutrients
Chemical Formula: $(\text{NH}_4)_2\text{SO}_4$
Creation Date: October 2013
Revision Date: March 2021

24 Hr Emergency Number: 082 771 2712

In case of poisoning:

Poison Information Centre: 082 446 8946

Tygerberg Hospital: (021) 931 6129

Poison Emergency Enquiries (021) 689 5227

In case of Spillage:

HAZMAT: 0800 147 112

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Product description: It is a dark brown powder

Component	CAS#
Ammonium Sulphate	7783-20-2
Water	7732-18-5

SECTION 3 - HAZARD IDENTIFICATION

Emergency Overview: Dark to light blue liquid. Odourless. Liquid may cause irritation to skin, eyes, nose, throat and lungs. Avoid breathing mist.

Skin: Irritation may result from prolonged skin contact.

Eyes: Contact with mist may cause eye irritation.

Inhalation: Mist inhalation may irritate nose, throat and lungs.

Ingestion: Not generally considered toxic. If swallowed, irritation may develop in the mouth, oesophagus, stomach, etc. the sulphate ion may cause purging.

Delayed Effects: None known.

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS

Skin contact: Wash promptly with soap and water and flush with water until chemical is removed. Remove any contaminated clothing and wash before reuse. Get medical attention for irritation.

Eye contact: Flush promptly with plenty of water for at least 15 minutes. Get medical attention.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen if a qualified operator is available. Get medical attention for irritation or discomfort.

Ingestion: If conscious, drink 2 to 4 glasses of water and induce vomiting by touching back of throat with finger. Advice to Physician: No specific advice. Treat according to symptoms present.

SECTION 5 - FIRE-FIGHTING MEASURES

Flash Point: Not Applicable.

Extinguishing Media: Any standard agent may be used. If involved in a fire, flood with water.

Fire and Explosion Hazards: Decomposes at elevated temperatures to produce toxic fumes of ammonia and sulphur oxides. If mixed with strong oxidizers such as ammonium nitrate or potassium salts (nitrite, nitrate or chlorate), a vigorous reaction or explosion may occur.

Fire fighting precautions / instructions: Since toxic gases may be released violently at high temperatures, fire fighters should wear full protective clothing and NIOSH approved, self-contained breathing apparatus. Use water to keep fire-exposed containers cool.

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SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Shovel up large spills (dry chemical) for use or disposal.
Sweep up small spills and maximize recovery.
Flush residue with water if permitted by applicable disposal regulations

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

Avoid contact with eyes, skin and clothing.
Avoid breathing dust.
Keep containers closed and avoid rough handling.
Follow good personal hygiene and housekeeping practices.
Store in a cool, dry place away from strong oxidizers, such as chlorates, nitrates and nitrites.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls: Provide local exhaust, if dusty conditions prevail.
Skin Protection: To minimize skin contact, wear long-sleeve shirt, trousers and gloves for routine product handling and use.
Eye Protection: Under dusty or misty conditions, wear chemical safety goggles. Do not wear contact lenses.
Respiratory Protection: Where dusty or misty conditions require it, use a NIOSH approved dust or mist respirator for needed protection.
Additional Recommendations: None generally required.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown powder
Odour: Odourless
Specific Gravity: 1.24 g/l
Solubility in Water: Infinite
pH: 4.9 – 5.5
Vapour Pressure: Not applicable.

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of use and storage.
Incompatibilities: Oxidizers; e.g., potassium salts - nitrite, nitrate, chlorate; also, chlorine and hypochlorite. Avoid contact with zinc-clad, copper and copper-bearing materials.
Hazardous Decomposition Products: Ammonia and sulphur trioxide and sulphur dioxide gases
Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Immediate (Acute) Effects: LD₅₀ (oral-rat): 3000 mg/kg
Skin irritation - A single dermal dose of 1 g elicited transient (reversible) mild dermal irritation in the rabbit.

SECTION 12 - ECOLOGICAL INFORMATION

Degradability: Not applicable.
Aquatic Toxicity: Daphnia magna: 25 hr. TLm: 423 mg/l
50 hr. TLm: 433 mg/l 100 hr. TLm: 292 mg/l

SECTION 13 - DISPOSAL CONSIDERATION

If discarded to waterways, it may promote eutrophication. Disposal must be in accordance with applicable disposal regulations. Users should consult with appropriate regulatory agencies before discharging or disposing of waste material.

14. TRANSPORT INFORMATION

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US DOT Hazard Class: Not regulated

US DOT ID Number: Not applicable

15. REGULATORY INFORMATION

TSCA Status: All components are on the TSCA Inventory.

Other TSCA Issues: None

Section 311 Hazard Class: Immediate.

Sara 313 Toxic Chemicals: CAS numbers and weight percents are found in Section 2.

Ingredient Name Comment: No ingredients listed in this section.

16. OTHER INFORMATION

All the information and instructions provided in this Material Safety Data Sheet are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. No responsibility will be accepted for errors or omissions or the consequence thereof. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons in receipt of this MSDS to ensure that all people who may use, handle, dispose or in any way come into contact with the product understands this information