

MATERIAL SAFETY DATA SHEET

ACADIAN® Marine Plant Extract Powder 1-1-17

1. PRODUCT AND COMPANY

TRADE NAME: ACADIAN® Marine Plant Extract Powder 1-1-17

APPLICATION: Extract from algae (*Ascophyllum nodosum*)

Producer/Importer: Acadian AgriTech

Address: 30 Brown Avenue

Postal Code & City: Dartmouth, Nova Scotia, Canada, B3B 1X8

Telephone: (902) 468-2840

Fax: (902) 468-3474

Contact Person: David Hiltz

Issued By: Technical Department (Acadian AgriTech)

2. COMPOSITION OF PRODUCT

| No. | Ingredients Name | CAS-NO | Cons. (weight%) | Classification |
|-----|--------------------|--------|-----------------|----------------|
| 1 | Extract from algae | n/a | 100% | IK |

Legend: T⁺ = Very Toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritant, IK = No Classification Required, E = Explosive, O = Oxidizing, F⁺ = Extremely Flammable, F = Very Flammable, Fo = Flammable, N = Dangerous to Environment, Mu = Genetoxic, Sens = Sensitizing, Care = Carcinogen, Repr = Causes Birth Defects

3. HAZARD IDENTIFICATION

This product does not require labeling.

4. FIRST AID**GENERAL**

Non-hazardous material. If irritation or discomfort occurs, seek medical advice from a physician.

EYE CONTACT

Non-irritating to ocular tissue. Immediately flush eyes with plenty of water. Keep eyes wide open while flushing. Seek medical attention if irritation occurs.

SKIN CONTACT

Non-irritating to skin. Wash with mild soap and water. Seek medical attention if discomfort occurs.

INHALATION

Non-toxic. Do not intentionally breathe vapors.

INGESTION

Non-toxic if ingested. Drink plenty of water or milk. Seek medical attention if discomfort occurs.

OVER EXPOSURE

Not applicable.

5. FIRE FIGHTING MEASURES**FLASH POINT**

Not applicable.

FLAMMABLE LIMITS

Not applicable.

PROPER FIREFIGHTING EQUIPMENT

Use extinguishing media appropriate for surrounding fire. Caution: Slippery in liquid form or when mixed with water.

FIRE AND EXPLOSION HAZARDS

Non-flammable. Non-explosive.

6. UNINTENTIONAL LIBERATION OR RELEASE MEASURES**SAFETY MEASUREMENTS TO PROTECT PERSONS**

Gloves and eye protection should be worn when handling due to temporary staining.

PROPER METHODS FOR DAMAGE LIMITATION AND CLEANUP

Spills may be easily cleaned by removing as much solid as possible and washing remaining spill with copious amounts of water. Avoid loose product on floor in damp areas as product may become slippery with the addition of clean-up water. Gloves and eye protection should be worn due to temporary staining.

7. HANDLING AND STORAGE

HANDLING ADVICE

Avoid handling which may cause staining. Use personal protective equipment as specified in section 8.

STORAGE

Store in cool place and out of direct sunlight. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

EXPOSURE CONTROL

No specific ventilation requirements. Eyewash facilities should be available.

RESPIRATION PROTECTION

No respirator is required.

EYE PROTECTION

Eye protection should be worn when handling due to temporary staining.

HAND PROTECTION

Gloves should be worn when handling due to temporary staining.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|----------------------------|--------------------|-------------------------------|------------------------|
| Form | Powder | Air Reactive | n/a |
| Color | Black | Percent Volatile (by Volume) | n/a |
| Odor | Marine-like | Bulk Density | 0.65 g/cm ³ |
| Solubility | 100% Water Soluble | Solubility in Water | 100% at 20°C |
| Melting Point/Range | Not Determined | Saturation Conc. | Not Determined |
| Expl. Limit LEL-UEL. %-% | n/a | Rel. Density Sat. Air (Air=1) | Not Determined |
| Vapor Pressure | Not Determined | Boiling Point/Range | Not Determined |
| Decomposition Temp. | Not Determined | pH Concentrate | 10 |
| pH Value | 10 - 10.5 | Viscosity | n/a |
| Flash Point | n/a | Smelling Limits lo-hi | Not Determined |
| Molecular Weight | Not Determined | Rel. Evap. Velocity | Not Determined |
| Ignition Temp. | 550°C | Water Reactive | n/a |
| Rel. Vapor Density (air=1) | Not Determined | | |

10. STABILITY AND REACTIVITY**STABILITY**

Product is stable.

CONDITIONS TO AVOID

Excessive heat or freezing.

MATERIALS TO AVOID

Oxidants and acids may cause degradation.

HAZARDOUS DECOMPOSITION PRODUCTS

Not applicable.

HAZARDOUS POLYMERIZATION

Will not occur.

11. TOXICOLOGICAL INFORMATION**ACUTE ORAL TOXICITY**

Non-toxic orally. Ingestion of significant amounts may cause nausea and discomfort.

ACUTE OCULAR TOXICITY

Non-irritating to the ocular tissue of non-irrigated eyes.

ACUTE DERMAL TOXICITY

Not toxic dermally. No treatment-related effects were observed.

ACUTE DERMAL IRRITATION

No irritation or corrosive effects were observed.

INHALATION TOXICITY

Not hazardous by inhalation.

SKIN SENSITIZATION

Very slight erythema observed with no other signs of irritation.

12. ECOLOGICAL INFORMATION**BREAKDOWN**

Biodegradable. Product presents minimal environmental impact.

ECOTOXICITY

Plant nutritional supplement and growth stimulant, high concentrations may cause burn of plants. Non toxic to marine algae, vertebrates or invertebrates.

13. DISPOSAL CONSIDERATIONS

Not classified as hazardous waste. Product must be disposed of according to Federal, State or local procedures.

14. TRANSPORT INFORMATION**GENERAL**

Non-hazardous material according to transport regulations. No special precautions are necessary.

15. REGULATORY INFORMATION**COMPOSITION**

Extract from algae (*Ascophyllum nodosum*)

R-PHRASES

The product does not require labeling. Marking according to hazardous product regulations is not required.

REFERENCES

The MSDS is prepared on basis of information given by the manufacturer.

16. OTHER INFORMATION

ISSUED: February 2009

VENDOR NOTES

Every endeavor has been made to ensure that the information contained in this MSDS leaflet is reliable, but we cannot accept liability for any loss, injury or damage, which may result from its use or misuse. Data given in this MSDS is solely for the guidance in safe handling and use of the product by customers; they do not form part of any specification. If any difficulties arise, we shall be glad to discuss them. Customers are encouraged to conduct their own tests following discussion with our technical department. The above information is based on experience, but it is always advisable for customers to satisfy themselves, by consultation with our technical department and small-scale testing is necessary, that product, which they have selected, is suitable for their purpose under their conditions of use.