

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 6/15/2023 Revision date: 8/28/2024 Supersedes: 4/17/2024 Version: 1.2

SECTION 1: Identification

1.1. Identification

Product form : Substance

Trade name : Acadian® Marine Plant Extract Powder 0.5-0-17

IUPAC name : Ascophyllum nodosum extract

CAS-No. : 84775-78-0

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Biostimulant

Fertilizer

1.3. Supplier

Acadian Plant Health, a division of Acadian Seaplants Limited

30 Brown Avenue

Dartmouth, Nova Scotia B3B 1X8

Canada

T +1 902 468 2840, F +1 902 468 3474

info@acadian.ca, www.acadianplanthealth.com

1.4. Emergency telephone number

Emergency number : For chemical emergency call Chemtrec (CCN # 1017009) 24hr/day 7days/week

Within USA and Canada: 1-800-424-9300 Outside USA and Canada, collect calls accepted:

+55 11 4349 1359 (South America) +52 55 8526 4930 (Central America)

+44 20 3885 0382 (EMEA) +65 3163 8374 (APAC)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : UVCB

Name	Product identifier	%	GHS US classification
Ascophyllum nodosum, extract	CAS-No.: 84775-78-0	> 95	Not classified

Full text of hazard classes and H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation : None under normal use. Dust of the product, if present, may cause respiratory irritation after

excessive inhalation exposure.

Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in

combination with tight clothing.

Symptoms/effects after eye contact : None under normal conditions. Dust from this product may cause eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

Chronic symptoms : No effects known.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire : Evacuate area.

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper

protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material

damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Protect from

moisture. Avoid raising dust. Do not breathe dust.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed. Storage conditions : Store at temperatures not exceeding -5 to 40 °C (23 to 104 °F).

Packaging materials : Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):







SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Flakes
Color : Black
Odor : Marine

Odor threshold : No data available pH : 10 - 10.5 pH solution concentration : 1 %

Melting point Not applicable Freezing point Not applicable Not applicable Boiling point Not applicable Flash point Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Non flammable Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density No data available $0.5 - 0.75 \text{ g/cm}^3$ Density Solubility Soluble in water Partition coefficient n-octanol/water (Log Pow) No data available Auto-ignition temperature Not applicable Decomposition temperature No data available : No data available Viscosity, kinematic Viscosity, dynamic : No data available

Lower explosion limit: Not applicable Upper explosion limit: Not applicable

: Not applicable

Explosive properties : Not explosive Oxidizing properties : Not oxidizing

9.2. Other information

Explosive limits

No additional information available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acadian® Marine Plant Extract Powder (84775-78-0)	
LD50 oral rat	> 5000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
Skin corrosion/irritation :	Not classified.
	pH: 10 – 10.5

Serious eye damage/irritation : Not classified pH: 10 - 10.5Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified

Viscosity, kinematic

: No data available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Ascophyllum nodosum, extract (84775-78-0)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, <i>Danio rerio</i> , Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [2]	> 100 mg/l Test organisms (species): <i>Pseudokirchneriella subcapitata</i> (previous names: <i>Raphidocelis subcapitata</i> , <i>Selenastrum capricornutum</i>)
ErC50 Algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, <i>Pseudokirchneriella subcapitata</i> , Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

Acadian® Marine Plant Extract Powder (84775-78-0)	
Persistence and degradability	Not rapidly degradable
Ascophyllum nodosum, extract (84775-78-0)	
Persistence and degradability	Not readily biodegradable in water

12.3. Bioaccumulative potential

Ascophyllum nodosum, extract (84775-78-0)		
Partition coefficient n-octanol/water (Log Pow)	≤ 3.3 (Weight of evidence approach, EU Method A.8: Partition Coefficient, 22 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4)	

12.4. Mobility in soil

Ascophyllum nodosum, extract (84775-78-0)		
Surface tension	51.1 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)	
Ecology - soil	No (test)data on mobility of the substance available	

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Comply with applicable regulations for solid waste disposal.

Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated Proper Shipping Name (TDG) : Not regulated Proper Shipping Name (IMDG) : Not regulated Proper Shipping Name (IATA) : Not regulated

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

14.3. Transport hazard class(es)

Transport hazard class(es) (DOT) : Not regulated Transport hazard class(es) (TDG) : Not regulated Transport hazard class(es) (IMDG) : Not regulated Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated Packing group (TDG) : Not regulated Packing group (IMDG) : Not regulated Packing group (IATA) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT : Not regulated TDG : Not regulated IMDG : Not regulated IATA : Not regulated : Not regula

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

Ascophyllum nodosum, extract (84775-78-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.

SECTION 16: Other information

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Not classified

Revision date : 8/28/2024

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.