

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Trade name : Toggle®
Product group : Trade product

1.2. Recommended use and restrictions on use

Recommended use : Fertilizer supplement and plant biostimulant

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 identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Not classified

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

No labelling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No additional information available

SECTION 3: Composition/information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
<i>Ascophyllum nodosum</i> , extract	<i>Ascophyllum nodosum</i> , ext. / seaweed extract	CAS-No.: 84775-78-0	Confidential	Not classified

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

SECTION 4: First-aid measures**4.1. Description of first aid measures**

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

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.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal conditions.
Chronic symptoms	: No effects known.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures**5.1. Suitable extinguishing media**

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

No additional information available

5.3. Specific hazards arising from the hazardous product

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.

5.4. Special protective equipment and precautions for fire-fighters

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.
Precautionary measures fire	: Evacuate area.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.2. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material.

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

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

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

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

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.

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.

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	: Liquid
Appearance	: No data available
Colour	: Black
Odour	: Marine
Odour threshold	: No data available
pH	: 5.5 – 6.5
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: Not applicable
Freezing point	: < 0 °C
Boiling point	: > 100 °C
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: > 1.04 g/cm ³
Solubility	: Soluble in water
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: Not available
Viscosity, dynamic	: < 100 cP
Explosive properties	: Not explosive
Oxidizing properties	: Not oxidizing
Explosive limits	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).
Incompatible materials	: No additional information available
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hardening time	: Not applicable.

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

Toggle®

LD50 oral rat	> 5000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
LC50 inhalation - rat	> 5.01 mg/l/4h

Skin corrosion/irritation : Not classified
 pH: 5.5 – 6.5
 Serious eye damage/irritation : Not classified
 pH: 5.5 – 6.5
 Respiratory 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 : Not available

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.
 Hazardous to the aquatic environment, short-term (acute) : Not classified.
 Hazardous to the aquatic environment, long-term (chronic) : Not classified.

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)
ErC50 Algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, <i>Pseudokirchneriella subcapitata</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>)

12.2. Persistence and degradability

Toggle®

Persistence and degradability	Not rapidly degradable
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Ascophyllum nodosum, extract (84775-78-0)

Persistence and degradability	Not readily biodegradable in water.
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12.3. Bioaccumulative potential

Toggle®

Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
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Ascophyllum nodosum, extract (84775-78-0)

Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
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Partition coefficient n-octanol/water (Log Pow)	≤ 3.3 (Weight of evidence approach, EU Method A.8: Partition Coefficient, 22 °C)
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12.4. Mobility in soil

Toggle®

Ecology - soil	No (test)data on mobility of the substance available.
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Ascophyllum nodosum, extract (84775-78-0)

Surface tension	51.1 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
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Ecology - soil	No (test)data on mobility of the substance available.
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12.5. Other adverse effects

Ozone : Not classified

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	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

SECTION 14: Transport information

In accordance with TDG / DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

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

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

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

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.
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14.6. Special precautions for user

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

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. National regulations

Ascophyllum nodosum, extract (84775-78-0)

Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: Other information

Issue date	: 2023-06-28
Revision date	: 2024-10-10
Supersedes	: 2024-04-30

Safety Data Sheet (SDS), Canada

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.