

**SECTION 1: Identification****1.1. Identification**

Product form : Mixture  
Trade name : Toggle®

**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 labeling**

No labeling 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

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

Not applicable

**3.2. Mixtures**

Name	Product identifier	%	GHS US classification
<i>Ascophyllum nodosum</i> , 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 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/doctor/physician 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.
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**

No additional information available

**SECTION 5: Fire-fighting measures****5.1. Suitable (and unsuitable) extinguishing media**

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

**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.

**6.1.1. 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. Stop leak if safe to do so.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material 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, if possible without risk.  
Methods for cleaning up : Take up liquid spill into absorbent material.  
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.  
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.

### 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
Color	: Black
Odor	: Marine
Odor threshold	: No data available
pH	: 5.5 – 6.5
Melting point	: Not applicable
Freezing point	: < 0 °C
Boiling point	: > 100 °C
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: > 1.04 g/cm³
Solubility	: Soluble in water
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not available
Viscosity, dynamic	: < 100 cP
Explosion limits	: Lower explosion limit: Not explosive Upper explosion limit: Not explosive
Explosive properties	: Not explosive
Oxidizing properties	: Not oxidizing

### 9.2. Other information

No additional information available

**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

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LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rat	> 2000 mg/kg body weight
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 or 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****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)**

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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Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
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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**

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	: Disposal must be done according to official regulations.
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

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**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.
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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. 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 : 9/25/2024

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.