SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name: Helmsman
Product form: Preparation

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: Soil Surfactant

1.3. Details of the supplier of the safety data sheet
Ocean Organics Corp.
P.O. Box 1448
Waldoboro, ME 04572
888-312-0106

1.4. Emergency telephone number
1-207-542-3808

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Serious eye damage: Category 1

2.2. Label elements
GHS-US labelling

Signal Word: Danger
Hazard statements: H318 Causes serious eye damage.

Precautionary statements:
Prevention:
P280 Wear eye protection/face protection.
Response:
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

2.3. Other hazards
None known

2.4. Unknown acute toxicity (GHS-US)
No data available

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Substance / Mixture: Preparation
SECTION 4: First aid measures

4.1. Description of first aid measures

General advice:
- Move out of dangerous area.
- Consult a physician.
- Show this safety data sheet to the doctor in attendance.
- Do not leave the victim unattended.

If inhaled:
- If unconscious place in recovery position and seek medical advice.
- If symptoms persist, call a physician.

In case of eye contact:
- Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
- In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Continue rinsing eyes during transport to hospital.
- Remove contact lenses.
- Protect unharmed eye.
- Keep eye wide open while rinsing.
- If eye irritation persists, consult a specialist.

If swallowed:
- Keep respiratory tract clear.
- Do NOT induce vomiting.
- Do not give milk or alcoholic beverages.
- Never give anything by mouth to an unconscious person.
- If symptoms persist, call a physician.
- Take victim immediately to hospital.

4.2. Most important symptoms and effects, both acute and delayed: Causes serious eye damage

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Product is not combustible.
Explosion hazard: Product is not explosive.
Reactivity: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions: Use cold water spray to cool fire-exposed containers to minimize risk of rupture. Do not dispose of fire-fighting water in the environment. Dispose of in accordance with relevant local regulations. Prevent human exposure to fire, fumes, smoke and products of combustion.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Ventilate area. Remove ignition sources. Evacuate area.

6.1.1. For non-emergency personnel

Protective equipment: Wear Protective equipment as described in Section 8.
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: For further information refer to section 8: “Exposure controls/personal protection”.

6.2. Environmental precautions

Product is used as a soil surfactant and as such, may enter the environment. Product is not expected to pose a hazard to the environment, but large quantity releases should be avoided. Prevent entry into waterways.

6.3. Methods and material for containment and cleaning up

For containment: Prevent further leakage or spillage, if safe to do so. Absorb spillage to prevent material damage.
Methods for cleaning up: Absorb spillage to prevent material damage. Use reasonable personal protective equipment as required. Soak up excess with inert absorbent material, or take up mechanically. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections
See Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Wear personal protective equipment. Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station.

7.2. Conditions for safe storage, including any incompatibilities

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
8.2. Exposure controls
Hazardous components without workplace control parameters
Components CAS-No.
Tridecyl Alcohol 8EO 78330-21-9

Appropriate engineering controls: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment: Gloves, Safety glasses, goggles

Hand protection: Wear gloves suitable for this specific application.
Eye protection: Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection: Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.
Respiratory protection: In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state: Liquid
Color: Clear, Light Tan
Odor: Characteristic
Odor Threshold: No data available
pH: 4.5 – 5.5
Relative evaporation rate (butylacetate=1): No data available
Melting point: No data available
Freezing point: 0°C
Boiling point: 100°C
Flash point: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapour pressure: No data available
Relative vapour density at 20°C: No data available
Relative density: 1.05 – 1.09 g/mL
Solubility: Soluble in water.
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

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
None known.

10.4. Conditions to avoid
Extremely high or low temperatures.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products
Carbon Oxides (monoxide (CO), carbon dioxide (CO₂), etc.)

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified
Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : May cause skin irritation.
Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion : May cause gastrointestinal irritation.

Product:
Remarks: Extremely corrosive and destructive to tissue. Serious eye damage/eye irritation. Causes serious eye damage. May cause irreversible eye damage.

SECTION 12: Ecological information

Soil surfactants may be harmful to aquatic life with short term effects, depending on amount released.

12.1. Toxicity
Ecology - general : No information available.

12.2. Persistence and degradability
Helmsman
Persistence and degradability : No data available.

12.3. Bioaccumulative potential
Helmsman
Bioaccumulative potential : No information available.
12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
No additional information available

**SECTION 13: Disposal considerations**

13.1. Waste treatment methods
The simplest method for disposal is to use the product as intended, as a soil surfactant applied to soils.

Waste treatment methods: Do not discharge to public wastewater systems without permit of pollution control authorities.
No discharge to surface waters is allowed without an NPDES permit.

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

**SECTION 14: Transport information**

In accordance with DOT
Not hazardous for transport

**Additional information**

Other information: No supplementary information available.

**Transport by sea**
No additional information available

**Air transport**
No additional information available

**SECTION 15: Regulatory information**

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Helmsman</th>
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</thead>
<tbody>
<tr>
<td>All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory or are exempt.</td>
</tr>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
</tr>
</tbody>
</table>

15.2. International regulations
No additional information available.

15.3. US State regulations
This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

**SECTION 16: Other information**

<table>
<thead>
<tr>
<th>Indication of changes</th>
<th>Revision 1.0: New SDS Created.</th>
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<td>Revision date</td>
<td>10/31/2017</td>
</tr>
<tr>
<td>Other information</td>
<td></td>
</tr>
</tbody>
</table>

**NFPA health hazard**

: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

**NFPA fire hazard**

: 1 - Must be preheated before ignition can occur.

**NFPA reactivity**

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

**HMIS III Rating**

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical</th>
<th>Personal Protection</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
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01/11/2018 Helmsman
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.