SAFETY DATA SHEET

1. Identification

Product identifier MI-GLOW® UNDERWATER 1
Other means of identification None.
Recommended use Non-destructive testing.
Recommended restrictions None known.
Manufacturer / Importer / Supplier / Distributor information
Company name Circle Systems, Inc.
Address 479 West Lincoln Ave.
P.O Box 1228
Hinckley, IL 60520
Telephone 815-286-3271
E-mail customerservice@circlesafe.com
Emergency phone number Chem-tel 800-255-3924 (US & Canada); +1-813-248-0585 (International)

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Serious eye damage/eye irritation Category 2A
Reproductive toxicity Category 1B
OSHA defined hazards Not classified.

Label elements

Signal word Danger
Hazard statement Causes serious eye irritation. May damage fertility or the unborn child.
Precautionary statement
Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling.
Response If exposed or concerned: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Storage Store locked up.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC) Not classified.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borax decahydrate</td>
<td>1303-96-4</td>
<td>&lt; 15</td>
</tr>
<tr>
<td>Sodium Carbonate</td>
<td>497-19-8</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Dioctyl Sodium Sulfosuccinate</td>
<td>577-11-7</td>
<td>&lt; 5</td>
</tr>
</tbody>
</table>
4. First-aid measures

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute and delayed**
Irritation of eyes and mucous membranes.

**Indication of immediate medical attention and special treatment needed**
Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

**General information**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If exposed or concerned: Get medical advice/attention.

5. Fire-fighting measures

**Suitable extinguishing media**
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
None known.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

**Specific methods**
No unusual fire or explosion hazards noted.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch or walk through spilled material. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up**
Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Flush area with plenty of water. For waste disposal, see Section 13 of the SDS.

**Environmental precautions**
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

**Precautions for safe handling**
Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid breathing mist/vapors/spray. Use with adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**
Keep container tightly closed. Store in a cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borax decahydrate (CAS 1303-96-4)</td>
<td>STEL</td>
<td>6 mg/m3</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>2 mg/m3</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>
MI-GLOW® UNDERWATER 1

US NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borax decahydrate (CAS 1303-96-4)</td>
<td>TWA</td>
<td>5 mg/m3</td>
</tr>
</tbody>
</table>

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear safety glasses with side shields (or goggles).

#### Skin protection

- **Hand protection**: Wear protective gloves.
- **Other**: Wear suitable protective clothing.

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. Physical and chemical properties

#### Appearance

- **Physical state**: Solid.
- **Form**: Powder.
- **Color**: Red.
- **Odor**: Detergent like.
- **Odor threshold**: Not available.
- **pH**: 8 – 9.5
- **Melting point/freezing point**: Not available.
- **Initial boiling point and boiling range**: Not available.
- **Flash point**: Not available.
- **Evaporation rate**: Not relevant.
- **Flammability (solid, gas)**: Not available.

#### Upper/lower flammability or explosive limits

- **Flammability limit – lower (%)**: Not relevant.
- **Flammability limit – upper (%)**: Not relevant.
- **Explosive limit – lower (%)**: Not available.
- **Explosive limit – upper (%)**: Not available.

#### Vapor pressure

Not available.

#### Vapor density

Not available.

#### Specific gravity

0.9 (68 °F (20 °C))

#### Solubility(ies)

10 – 99 % Soluble.

#### Partition coefficient (n-octanol/water)

Not available.

#### Auto-ignition temperature

Not relevant.

#### Decomposition temperature

Not relevant.

#### Viscosity

Not available.

#### Other information

- **VOC (Weight %)**: Not applicable.
10. Stability and reactivity

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

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion
Expected to be a low ingestion hazard.

Inhalation
May cause irritation to the respiratory system.

Skin contact
May cause skin irritation.

Eye contact
Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Irritation of eyes and mucous membranes.

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borax decahydrate (CAS 1303-96-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 Rabbit</td>
<td></td>
<td>&gt; 10000 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 Rat</td>
<td></td>
<td>5.66 g/kg</td>
</tr>
<tr>
<td>Dioctyl Sodium Sulfosuccinate (CAS 577-11-7)</td>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 Mouse</td>
<td></td>
<td>2.64 g/kg</td>
</tr>
<tr>
<td>Sodium carbonate (CAS 497-19-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50 Rat</td>
<td></td>
<td>2300 mg/m³, 2 Hours</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory sensitization
This product is not expected to cause respiratory sensitization.

Skin sensitization
This product is not expected to cause skin sensitization.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive toxicity
May damage fertility or the unborn child.

Specific target organ toxicity – single exposure
Not classified.

Specific target organ toxicity – repeated exposure
Not classified.

Aspiration hazard
Not classified.

Chronic effects
Prolonged inhalation may be harmful.
12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available for this product.

Mobility in soil
Not available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

14. Transport information

DOT
Not regulated as a hazardous material by DOT.

IATA
Not regulated as a dangerous good.

IMDG
Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories
Immediate Hazard – Yes
Delayed Hazard – Yes
Fire Hazard – No
Pressure Hazard – No
Reactivity Hazard – No

SARA 302 Extremely hazardous substance

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>Reportable quantity</th>
<th>Threshold planning quantity</th>
<th>Threshold planning quantity, lower value</th>
<th>Threshold planning quantity, upper value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>50-00-0</td>
<td>100</td>
<td>500 lbs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous chemical
SARA 313 (TRI reporting)
Not regulated.
Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US Massachusetts RTK - Substance List
Borax decahydrate (CAS 1303-96-4).

US New Jersey Worker and Community Right-to-Know Act
Borax decahydrate (CAS 1303-96-4).

US Pennsylvania RTK - Hazardous Substances
Borax decahydrate (CAS 1303-96-4).

US Rhode Island RTK
Not regulated.

US California Proposition 65
WARNING: This product does contain a chemical known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
Formaldehyde (CAS 50-00-0).

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*"A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 11-February-2015
Revision date 10-August-2017
Version # 02

NFPA Ratings

List of abbreviations

LC50: Lethal Concentration, 50%.
LD50: Lethal Dose, 50%.
STEL: Short-term Exposure Limit
TWA: Time Weighted Average

References

HSDB® - Hazardous Substances Data Bank

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