1. Identification

Product identifier MI-GLOW® 218X
Other means of identification Not available.
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 Reproductive toxicity (fertility, the unborn child) Category 1B
OSHA defined hazards Not classified.
Label elements
  Signal word Danger
  Hazard statement 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. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
    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.

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; 50</td>
</tr>
<tr>
<td>Iron Oxide</td>
<td>1317-61-9</td>
<td>&lt; 15</td>
</tr>
<tr>
<td>Iron</td>
<td>7439-89-6</td>
<td>&lt; 35</td>
</tr>
<tr>
<td>Sodium Carbonate</td>
<td>497-19-8</td>
<td>&lt; 3</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**
Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion**
If ingestion of a large amount does occur, call a poison control center immediately.

**Most important symptoms/effects, acute and delayed**
Dust may irritate the respiratory tract, skin, and eyes.

**Indication of immediate medical attention and special treatment needed**
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.

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**
Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.

**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**
Use standard firefighting procedures and consider the hazards of the other involved materials.

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>
### 9. Physical and chemical properties

**Appearance**
- **Physical state**: Solid.
- **Form**: Powder.
- **Color**: Dark green
- **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 relevant.

**Vapor density**
- Not relevant.

**Specific gravity**
- 1.1 (68 °F (20 °C))

**Solubility(ies)**
- Soluble in water.

**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
No adverse effects due to skin contact are expected.

Eye contact
Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity

Information on toxicological effects

Acute toxicity

Components

Species

Test Results

Borax decahydrate (CAS 1303-96-4)
Acute
Dermal
LD50
Rabbit
> 10000 mg/kg
Oral
LD50
Rat
2660 mg/kg

Sodium carbonate (CAS 497-19-8)
Acute
Inhalation
LC50
Rat
2.3 mg/l, 2 hours
Oral
LD50
Rat
4090 mg/kg

Iron (CAS 7439-89-6)
Acute
Oral
LD50
Rat
30 g/kg

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

Serious eye damage/eye irritation
Direct contact with eyes may cause temporary irritation.

Respiratory sensitization
Not a respiratory sensitizer.

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.

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.


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

Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard Categories

Immediate Hazard – No
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.

Food and Drug Administration (FDA)
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 12-November-2014
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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