




SAFETY DATA SHEET

1. Identification

| | | |
|---|---|---|
| Product identifier | MI-GLOW® 850 | |
| 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 | 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. Immediately call a poison center/doctor. | |
| 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

| Chemical name | CAS number | % |
|--------------------------------|------------|------|
| Borax decahydrate | 1303-96-4 | < 65 |
| Diocetyl Sodium Sulfosuccinate | 577-11-7 | < 3 |
| Sodium Carbonate | 497-19-8 | < 2 |
| Iron Oxide | 1317-61-9 | < 1 |

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 | Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. |
| 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

| | |
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| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). |
| 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. |
| General fire hazards | No unusual fire or explosion hazards noted. |

6. Accidental release measures

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|--|--|
| 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

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|---|---|
| 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

US NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|-----------------------------------|------|---------------------|
| Borax decahydrate (CAS 1303-96-4) | TWA | 5 mg/m ³ |

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 | Slight. Detergent like. |
| Odor threshold | Not available. |
| pH | 8 – 10. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | Not relevant. |
| 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 | 0.8 (at 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

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|---------------------------------|---|
| 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 | No dangerous reaction known under conditions of normal use. |

reactions

| | |
|---|--|
| 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

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|---|--|
| 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 | Causes serious eye damage. Dusts may irritate the respiratory tract, skin and eyes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Upper respiratory tract irritation. Coughing. Skin irritation. |

Information on toxicological effects

Acute toxicity

| Components | Species | Test Results |
|---|---|----------------------------------|
| Borax decahydrate (CAS 1303-96-4) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 10000 mg/kg |
| Diocetyl Sodium Sulfosuccinate (CAS 577-11-7) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Mouse | 2.64 g/kg |
| Sodium carbonate (CAS 497-19-8) | | |
| Acute | | |
| <i>Inhalation</i> | | |
| LC50 | Rat | 2300 mg/m ³ , 2 Hours |
| <i>Oral</i> | | |
| LD50 | Rat | 4090 mg/kg |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. | |
| Serious eye damage/eye irritation | Causes serious eye damage. | |
| 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. | |
| 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

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|--------------------------------------|--|
| 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 | No data 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 dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

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.

US OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

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

| Chemical Name | CAS Number | Reportable quantity | Threshold planning quantity | Threshold planning quantity, lower value | Threshold planning quantity, upper value |
|---------------|------------|---------------------|-----------------------------|--|--|
| Formaldehyde | 50-00-0 | 100 | 500 lbs. | | |

SARA 311/312 Hazardous chemical Yes

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

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

*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 | 2-April-2015 |
| Revision date | 10-August-2017 |
| Version # | 03 |

NFPA Ratings



| | |
|-----------------------|----------------------------------|
| List of abbreviations | LC50: Lethal Concentration, 50%. |
| | LD50: Lethal Dose, 50%. |
| | TWA: Time weighted average |

References HSDB® - Hazardous Substances Data Bank

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