

SAFETY DATA SHEET

1. Identification

Product identifier	MI-GLOW [®]	418	
Other means of identification	None.		
Recommended use	Non-destructive testing.		
Recommended restrictions	None known.		
Manufacturer / Importer / Supplier / Distributor information			
Company name	Circle Systems, Inc. 1210 Osborne Road		
Address			
	Saint Marys, GA 31558		
Telephone	912-729-2735		
E-mail	customerservice@circlesafe.com		
Emergency phone number	Chem-tel	800-255-3924 (US & Canada); +1-813-248-0585 (International)	

2. Hazard(s) identification

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Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
OSHA defined hazards	Not classified.	
Label elements		
Signal word	Warning	
Hazard statement	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.	
Precautionary statement		
Prevention	Wash thoroughly after handling. Avoid breathir ventilated area. Wear protective gloves/protect	ng mist or vapor. Use only outdoors or in a well- ive clothing/eye protection/face protection.
Response	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. If on skin; Wash with plenty of water. If skin irritation occurs; Get medical advice/attention. Take off contaminate clothing and wash before reuse. If inhaled; Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.	
Storage	Store in a well-ventilated place. Keep contained	
Disposal	Dispose of contents/container in accordance w	ith local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Not classified.	

3. Composition/information on ingredients

Chemical name	CAS number	%
Iron	7439-89-6	< 20
Iron Oxide	1317-61-9	< 10
Sodium Tripolyphosphate	7758-29-4	< 60
Tetrasodium pyrophosphate	7722-88-5	< 5

Alcohols, C 12-14 ethoyxlated, propoxylated

577-11-7

< 5

< 5

68439-51-0

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physicia 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 persist	
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lung Get medical attention if symptoms occur.	
Most important symptoms/effects, acute and delayed	Direct contact with skin and eyes may cause irritation.	
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.	
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.	
	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.	
and precautions for firefighters 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.	
and precautions for firefighters Fire-fighting	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.	
and precautions for firefighters Fire-fighting equipment/instructions 6. Accidental release mea Personal precautions, protective equipment and	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. asures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch or walk through spilled material. Ensure adequate ventilation.	
and precautions for firefighters Fire-fighting equipment/instructions 6. Accidental release mea Personal precautions, protective equipment and emergency procedures Methods and materials for	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. asures 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. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust	
and precautions for firefighters Fire-fighting equipment/instructions 6. Accidental release mea Personal precautions, protective equipment and emergency procedures Methods and materials for containment and cleaning up Environmental precautions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. ASURES 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. 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 . Avoid discharge into drains, water courses or onto the ground.	
and precautions for firefighters Fire-fighting equipment/instructions 6. Accidental release mea Personal precautions, protective equipment and emergency procedures Methods and materials for containment and cleaning up	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. ASURES 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. 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 .	

8. Exposure	e controls/persoi	nal protection
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Occupational exposure limits US NIOSH: Pocket Guide to Chemical Hazards			
Components	Туре	Value	
Tetrasodium pyrophospha 7722-88-5)	ate (CAS TWA	5 mg/m3	
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 measu Eye/face protection	res, such as personal protective eq Wear safety glasses with side shi	•	
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 protecti	ve clothing, when necessary.	
General hygiene considerations		moke. Always observe good personal hygiene measures, such erial and before eating, drinking, and/or smoking. Routinely was ment to remove contaminants.	

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Powder.
Color	Green.
Odor	Detergent like.
Odor threshold	Not available.
рН	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 exp	losive limits
Flammability limit – lower (%)	Not relevant.
(%) Flammability limit – upper (%)	Not relevant.
Explosive limit – lower (%)	Not available. Not
Explosive limit – upper (%)	available. Not
Vapor pressure	relevant. Not
Vapor density	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.

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		

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 serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics Information on toxicological ef	Dusts or powder may irritate the respiratory tract, skin, and eyes.
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Acute toxicity

Ingestion of large quantities may cause irritation, nausea, vomiting, diarrhea, bluish-purple discoloration of skin, decreased blood pressure, decreased heart rate, coma.

Components	Species	Test Results
Iron (CAS 7439-89-6)		
Acute		
Oral		
LD50	Rat	30 g/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory sensitization	No data available.	
Skin sensitization	No data available.	
Germ cell mutagenicity	No data available.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
Reproductive toxicity	Not expected to be a reproductive hazard.	
Specific target organ toxicity – single exposure	No data available.	
Specific target organ toxicity – repeated exposure	No data available.	
Aspiration hazard	No data available.	

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.

Disposal instructions				at licensed waste disp		
		of contents/container in accordance with local/regional/national/international regulations. 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).				
Naste from residues / unusec products	product res					
14. Transport informatio	n					
DOT						
Not regulated as dangerous	s goods.					
ATA						
Not regulated as dangerous MDG	s goods.					
Not regulated as dangerous	s goods.					
Transport in bulk according to Annex II of MARPOL 73/78 an the IBC Code		ble.				
15. Regulatory informati	on					
US federal regulations	Communie	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.				
Not regulated. US OSHA Specifically Reg Not listed.		-	0.1001-1050)			
US OSHA Specifically Reg		-	0.1001-1050)			
US OSHA Specifically Reg Not listed. CERCLA Hazardous Subst Not listed.	ance List (40 C	FR 302.4)				
US OSHA Specifically Reg Not listed. CERCLA Hazardous Subst Not listed.	ance List (40 C Reauthorization Immediate Delayed Ha Fire Hazarc Pressure H	FR 302.4) n Act of 1986 (S/ Hazard – Yes azard – No 1 – No azard – No				
US OSHA Specifically Reg Not listed. CERCLA Hazardous Subst Not listed. Superfund Amendments and Hazard Categories	ance List (40 C Reauthorization Immediate Delayed Ha Fire Hazarc Pressure H Reactivity H	FR 302.4) n Act of 1986 (S/ Hazard – Yes azard – No I – No				
US OSHA Specifically Reg Not listed. CERCLA Hazardous Subst Not listed. Superfund Amendments and Hazard Categories	ance List (40 C Reauthorization Immediate Delayed Ha Fire Hazarc Pressure H Reactivity H	FR 302.4) n Act of 1986 (S/ Hazard – Yes azard – No 1 – No azard – No		Threshold planning quantity, lower value	Threshold planning quantity, upper value	
US OSHA Specifically Reg Not listed. CERCLA Hazardous Subst Not listed. Superfund Amendments and Hazard Categories SARA 302 Extremely hazardou Chemical name	ance List (40 C Reauthorization Immediate Delayed Ha Fire Hazarc Pressure H Reactivity H us substance	FR 302.4) n Act of 1986 (SA Hazard – Yes azard – No 1 – No azard – No Hazard – No Hazard – No	ARA) Threshold	planning quantity,	quantity, upper	
US OSHA Specifically Reg Not listed. CERCLA Hazardous Subst Not listed. Superfund Amendments and Hazard Categories SARA 302 Extremely hazardou Chemical name	ance List (40 C Reauthorization Immediate Delayed Ha Fire Hazard Pressure H Reactivity H us substance	FR 302.4) n Act of 1986 (S/ Hazard – Yes azard – No 1 – No azard – No Hazard – No Reportable quantity	ARA) Threshold planning quantity	planning quantity,	quantity, upper	
US OSHA Specifically Reg Not listed. CERCLA Hazardous Subst Not listed. Superfund Amendments and Hazard Categories GARA 302 Extremely hazardou Chemical name Formaldehyde SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated.	ance List (40 C Reauthorization Immediate Delayed Ha Fire Hazarc Pressure H Reactivity H us substance CAS number	FR 302.4) n Act of 1986 (S/ Hazard – Yes azard – No 1 – No azard – No Hazard – No Reportable quantity	ARA) Threshold planning quantity	planning quantity,	quantity, upper	
US OSHA Specifically Reg Not listed. CERCLA Hazardous Subst Not listed. Superfund Amendments and Hazard Categories GARA 302 Extremely hazardou Chemical name Formaldehyde SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Clean Air Act (CAA) Section	ance List (40 C Reauthorization Immediate Delayed Ha Fire Hazarc Pressure H. Reactivity H US SUBStance CAS number	FR 302.4) n Act of 1986 (S) Hazard – Yes azard – No 1 – No azard – No Hazard – No Hazard – No Reportable quantity 100	ARA) Threshold planning quantity 500 lbs	planning quantity,	quantity, upper	
US OSHA Specifically Reg Not listed. CERCLA Hazardous Subst Not listed. Superfund Amendments and Hazard Categories SARA 302 Extremely hazardou Chemical name Formaldehyde 5 SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations	ance List (40 C Reauthorization Immediate Delayed Ha Fire Hazard Pressure H Reactivity H us substance CAS number 0-00-0 Yes	FR 302.4) n Act of 1986 (S/ Hazard – Yes azard – No azard – No Hazard – No Reportable quantity 100 us Air Pollutants	ARA) Threshold planning quantity 500 lbs	planning quantity, lower value	quantity, upper	

US state regulations

US Massachusetts RTK - Substance List

Tetrasodium pyrophosphate (CAS 7722-88-5) Sodium Tripolyphosphate (CAS 7758-29-4)

US New Jersey Worker and Community Right-to-Know Act Tetrasodium pyrophosphate (CAS 7722-88-5) US

Pennsylvania RTK - Hazardous Substances

Tetrasodium pyrophosphate (CAS 7722-88-5)

Sodium Tripolyphosphate (CAS 7758-29-4)

US Rhode Island RTK

Sodium Tripolyphosphate (CAS 7758-29-4)

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)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical	No
·	Substances (EINECS)	
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)	Yes
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	7-July-2014
Revision date	30-January-2019
Version #	03
HMIS [®] ratings	Health: 1 Flammability: 0 Physical Hazard: 0
NFPA Ratings	
List of abbreviations	LD50: Lethal Dose, 50% TWA: Time weighted average
References	HSDB [®] - Hazardous Substances Data Bank
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