



Safety Data Sheet

Formula No: 2310
Revision Date: 2017/10/24
Superseded Date: 2015/05/01

Mirachem Corrosion Inhibitor (Powder)

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND OF THE COMPANY

Product name: Mirachem Corrosion Inhibitor (Powder)
Identified uses: Concentrated industrial corrosion inhibitor additive. Recommended use dilution is 0.1% in use dilutions of Mirachem industrial cleaning solutions.
Use restrictions: Use only for the purposes indicated on the label.

Company: Mirachem, LLC
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Phoenix, Arizona 85063-4059
USA

Email address: SDS@mirachem.com
Customer service: USA (English) Telephone: 1 (800) 847-3527
Emergency phone number(s): USA (English, Business Hours) Telephone: 1 (800) 847-3527
Chemtrec (US, 24 hours) Telephone: 1 (800) 424-9300

2. HAZARD(S) IDENTIFICATION

GHS Classification

SKIN CORROSION / IRRITATION Category 1B
EYE DAMAGE / IRRITATION Category 1
ACUTE AQUATIC TOXICITY Category 2

GHS Label Elements

Pictogram



Signal word

Danger

Hazard statements

Causes severe skin burns and eye damage. (H314)
Toxic to aquatic life (H401)

Precautionary Statements

Prevention:

Do not breathe dust/fume/mist. (P260)
Wash hands thoroughly after handling. (P264)
Wear protective gloves/protective clothing/eye protection/face protection. (P280)
Avoid release to the environment. (P273)

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. (P301 +P330 + P331)
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. (P303 + P361 + P353) Wash contaminated clothing before reuse. (P363)
IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304 + P340) Immediately call POISON CENTER/doctor. (P310)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338)

Storage:

Store locked up. (P405)

Disposal:

Dispose of contents/container in accordance with local/ regional/ national/ international regulations. (P501) See SECTION 13 – DISPOSAL CONSIDERATIONS, for additional waste disposal information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Mixture (powder)

<u>Ingredient:</u>	<u>CAS Number</u>	<u>Percent</u>
Silicic acid, disodium salt	6834-92-0	50 – 90
Sodium Nitrite	7632-00-0	1 – 10

4. FIRST AID MEASURES

Protection of First-Aiders: First aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION, for specific personal protective equipment.

Inhalation: Spray mist may be irritating. Remove to fresh air. If breathing difficulty or irritation is severe or continues, immediately call for medical advice or assistance.

Eye contact: May cause serious eye damage. Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately seek medical attention.

Ingestion: If swallowed, rinse mouth with water. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Never give anything by mouth to an unconscious person.

Skin contact: Skin exposure may cause severe irritation or burns. If on skin, immediately wash skin with plenty of water. Take off contaminated clothing and wash before reuse. If irritation develops, persists or is severe, immediately contact POISON CENTER or seek medical attention.

Symptoms and effects, both acute and delayed: Aside from the information provided above and below, no additional symptoms and effects are anticipated.

Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Skin contact may aggravate pre-existing dermatitis.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Do not use direct water stream. May spread fire.

Unusual fire and explosion hazards: Not applicable.

Hazardous thermal decomposition products: Decomposition products may include the following materials; carbon dioxide, carbon monoxide, nitrogen oxides.

Special precautions for fire fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving personal risk or without suitable training.

Special protective equipment for fire fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Isolate area. Keep unnecessary and unprotected personnel from entering the area. Do not touch or walk through spilled material. Wear safety glasses with side shields or chemical goggles, protective clothing, chemical resistant gloves, and rubber boots. Spilled material may cause a slipping hazard. For additional information, refer to SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION. Refer to SECTION 7 – HANDLING AND STORAGE, for additional precautionary measures.
Environmental precautions:	Prevent from entering into soil, ditches, storm sewers, waterways and/or ground water. See SECTION 12 – ECOLOGICAL INFORMATION for additional information.
Methods for cleaning up:	Sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials. Dispose of in accordance with Local, State and Federal regulations. See SECTION 13 – DISPOSAL CONSIDERATIONS and SECTION 15 – REGULATORY REQUIREMENTS for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling:	Avoid contact with skin, eyes, clothing or shoes. Avoid breathing spray or mist. Do not swallow. Wash hands thoroughly after handling. Keep container closed. Promptly clean up spills. See SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION for additional information.
Conditions for safe storage, including incompatibilities:	Keep containers tightly closed. Protect from freezing; may rupture or degrade product. Store locked up. Store between 40°F (4°C) and 110°F (43°C). Keep out of reach of children. The shelf life for unopened containers stored under the above conditions is 60 months from the date on the package.
Recommended packaging materials:	Use plastic bags to enclose product containers to avoid caking. Use original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:	None established (under ACGIH or OSHA.)
Engineering controls:	Good ventilation should be sufficient to control worker exposure to airborne contaminants. Provide additional ventilation as necessary to keep airborne concentrations of vapors/mists below threshold limit values. Provide eye wash station within close proximity to product usage.
Eye/Face protection:	Safety glasses with side shields (or chemical goggles) and face shield (if splashing is likely) to prevent eye and face exposure.
Skin protection:	Wear protective gloves/protective clothing as needed to prevent skin contact. Where diluted product is heated to >140°F, wear thermal protective gloves.
Hand protection:	Wear chemical (alkali) resistant, impermeable gloves (nitrile, vinyl or latex of 4 mil thickness or greater) as needed to prevent skin contact. Where diluted product is heated to >140°F, wear thermal protective gloves.
Respiratory protection:	Under intended handling conditions, no respiratory protection should be needed. Do not breathe dusts or mists. Use NIOSH or MSHA approved respirator where conditions may cause exposure limits to be exceeded.
Personal hygiene:	Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to yellow granular powder	Vapor pressure @ 20°C @ 37°C	Not applicable Not applicable
Odor:	Essentially odorless	Vapor density (air = 1)	Not applicable
Odor threshold:	Not available	Relative density:	Not established
pH:	Not applicable	Solubility in water:	Complete
pH at use dilution:	10.5 – 11.4	Partition coefficient:	Not established
Melting point:	Not applicable	Auto-ignition temperature:	Not established
Freezing point:	Not applicable	Decomposition temperature:	Not established
Initial boiling point:	Not applicable	Viscosity @ 20°C:	Not applicable
Evaporation rate:	Not established	Liquid density @ 20°C:	Not applicable
Flash point:	Not established	VOC, undiluted	0.0 g/l (0.0 lb./gal)
Flammability:	Not classified		
Flammable limits in air:	Not established		

10. STABILITY AND REACTIVITY

Chemical stability & reactivity:	The product is stable.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid:	No specific data.
Incompatible materials:	Avoid contact with strong acids.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition may produce CO ₂

11. TOXICOLOGICAL INFORMATION

The GHS health hazard classifications have been calculated adhering to GHS guidelines for mixtures. The Acute Toxicity Estimates for this mixture (ATE_{mix}) are representative of these calculations.

Likely routes of exposure: Inhalation X Skin contact X Eye contact X Ingestion X

Acute Toxicity:

Oral:	Not classified (OSHA HCS 2012)	LD ₅₀ ATE _{mix}	> 500 but < 2,500 mg/kg
Dermal:	No relevant data available.		
Inhalation:	No relevant data available.		
Other routes:	Not applicable.		

Skin corrosion/irritation:	Highly alkaline, expected to be corrosive to skin.
Serious eye damage/irritation:	Highly alkaline, expected to cause serious damage or burns to eyes.
Skin sensitization:	No relevant data available.
Respiratory sensitizer:	No relevant data available.

Chronic Toxicity:

Mutagenicity:	No component of this mixture is known to be a mutagen or genotoxin.
Carcinogenicity:	No component of this mixture is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.
Teratogenicity:	No component in this mixture is known to be a teratogen.
Developmental / Fertility effects:	No known significant effects or critical hazards.

Specific Target Organ Toxicity (STOT)	Single dose:	No relevant data available.
	Repeat exposure:	No relevant data available

Aspiration hazard: No relevant data available.

12. ECOLOGICAL INFORMATION

The GHS environmental hazard classifications have been calculated adhering to GHS guidelines for mixtures. The Acute Aquatic Toxicity Estimates for this mixture (ATE_{mix}) are representative of these calculations.

Toxicity:

Acute Aquatic Toxicity	Fish	Category 2	LC ₅₀ ATE _{mix}	> 1 but < 10 mg/l
	Crustacea	No relevant data available.		
	Algae	No relevant data available.		
Chronic Aquatic Toxicity	No relevant data available.			
Persistence and degradability:	The individual components of this mixture are readily biodegradable.			
Bioaccumulative potential:	No relevant data available.			
Mobility in soil:	No relevant data available.			

13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Empty containers may retain some product residues. Rinse container before disposal. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff with soil and waterways.

RCRA Classification: Unused disposed material is **not** a RCRA Hazardous Waste.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, State and local waste disposal requirements may be more restrictive or otherwise different from Federal laws and regulations.

14. TRANSPORT INFORMATION

UN Number:	UN 1759	Transportation Hazard Class:	8
UN Proper Shipping Name:	Corrosive Solid, n.o.s.	UN Packing Group:	PG II
ADR (EU Carriage):	Class 8: Corrosive, PG II	RID (Rail)	Class 8: Corrosive, PG II
AND/ADNR (Inland water):	Not available	ICAO/IATA (Air)	Class 8: Corrosive
IMO/IMDG (Marine):	Class 8: Corrosive		
DOT Shipping Name:	UN 1759 Corrosive solid, n.o.s. (contains Silicic Acid, disodium salt and Sodium Nitrite) 8, PG II		
NMFC Freight Class:	Cleaning Compound NOI, 048580 Sub 3, Class 55		
HS Tariff Classification (Schedule B)	3403.19.50		
Special Precautions:	No known special precautions.		

15. REGULATORY INFORMATION

US Federal Regulations

SARA Title III

Section 302 – Extremely Hazardous Substance

This product does not contain chemicals at levels which require reporting under this statute.

Section 302.4 & 304: CERCLA: Hazardous Substances

Releases of this product to air, land, or water are reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.

	Sodium Nitrite (CAS No. 7632-00-0)	100 lbs.
Sections 311 & 312	Immediate (acute) Health Hazard	Yes
	Delayed (chronic) Health Hazard	No
	Fire Hazard	No
	Reactive Hazard	No
	Sudden Release of Pressure	No

Section 313

This product does contain chemicals at levels which require reporting under this statute.

Sodium Nitrite (CAS No. 7632-00-0) 100 lbs.

TSCA

All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

US State Regulations

California	California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)	This product does not contain any materials currently listed by California as chemicals known to cause cancer or known to have reproductive toxicity under Proposition 65.
Pennsylvania	Hazardous Substances List	This product does contain a chemical listed as an environmental hazard that may require reporting. Sodium Nitrite (CAS No. 7632-00-0)

International Regulatory Information

Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warrantee, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with their Federal, State/Province, and local laws. The following specific information is made for the purpose of complying with numerous specific foreign regulations.

Country Substance (Chemical) Inventories

Canada	DSL	The individual components of this mixture are listed.
United States	TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

16. OTHER INFORMATION

HMIS Rating:

Health	2
Flammability	0
Physical Hazards	0

Protective Equipment

NFPA Rating:

Health	2
Flammability	0
Reactivity	0

Special

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. Mirachem shall not be held responsible for any defect in the product covered by this SDS, should the existence of such defect not be detectable considering the current status of scientific and technical knowledge.

Original Preparation Date: May 1, 2015
Latest Revision Date: October 24, 2017