

Product Safety Data Sheet

Section 1: Identification

Product Name: **CS-210**

Function: Closed loop heating/cooling system corrosion inhibitor

Manufacturer: Chemco Products, Inc., 1349 Grand Oaks Drive, Howell, MI 48843

Phone Number: 517-546-7800

Transport Emergency Phone Number: Chemtrec, 800-424-9300

SDS Issue Date: October 31, 2014

Revision Number: 01

Section 2: Hazard Identification



Hazard Classifications: Toxic by ingestion, toxic to aquatic life

Signal Word: **WARNING!**

- **HARMFUL IF SWALLOWED**
- **VERY TOXIC TO AQUATIC LIFE**

Precautionary Statements:

- **Contains sodium nitrite – may be toxic by ingestion.**
- **This product is toxic to aquatic life: prevent spills from contaminating natural waterways.**
- **May cause irritation or burns to the eyes and skin. Wear recommended protective clothing and eyewear when handling this product.**

Non-Classified Hazards: None

Section 3: Hazardous Ingredients

<u>Ingredient Name</u>	<u>CAS Number</u>	<u>net % by weight</u>
Sodium nitrite*	7632-00-0	20.0

* Toxic ingredient subject to the reporting requirements of EPCRA Section 313 and 40 CFR Part 372.

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Section 4: First Aid Procedures

- Skin Contact: Prolonged contact with skin may produce severe irritation or burns. Remove contaminated clothing and flush contact area with water for 15 minutes. Seek medical attention if irritation persists.
- Eye Contact: Contact with eyes may result in irritation. Immediately flush eyes with water or ophthalmic rinse solution; continue flushing with water for 15 minutes to remove any residual material. Seek immediate medical attention.
- Inhalation: Inhalation of product mists may cause respiratory irritation or burns. Move victim to fresh air. If breathing is difficult, provide oxygen. If irritation persists, seek medical attention.
- Ingestion: Product is toxic by ingestion, due to sodium nitrite content. If victim is conscious, provide water or milk to dilute ingested material. Do not induce vomiting unless instructed by a physician or Poison Control Center. Get immediate medical attention.

Section 5: Fire-Fighting Measures

- Special Hazards: Thermal decomposition may produce hazardous CO, SO_x, and NO_x fumes. Wear self-contained breathing apparatus.
- Extinguishing Media: For small fires, use A-B-C fire extinguisher. Large fires may be extinguished with any media suitable for the surrounding fire.

Section 6: Accidental Release Measures

- First Responders should wear all recommended personal protective equipment outlined in Section 8. For large spill cleanup, personnel should wear a chemical-resistant splash suit or coveralls.
- Prevent spills from contaminating natural waterways or municipal sewer systems. Use chemical-resistant spill control socks/booms to minimize spread of spill.
- Reclaim as much spilled material as possible and return to original container. Use absorbent material to remove remaining liquid residue and place into sealable container for proper disposal.

Section 7: Storage and Handling

- Store at room temperature away from reactive materials, such as acids. Keep container closed when not in use.
- Do not add product to fluids containing amine substances: carcinogenic nitrosamines may be produced.
- Use containment devices to prevent uncontrolled spills.
- Locate emergency eye wash/safety shower near area of use.
- Do not eat, drink, or smoke while handling product; wash thoroughly with soap after handling.

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Section 8: Personal Protection and Exposure Controls

Protective Equipment Requirements:

1. Face shield or safety goggles
2. Chemical-resistant gloves
3. Chemical-resistant apron
4. Chemical-resistant boots

Airborne Exposure Limits

<u>Hazardous Ingredient</u>	<u>Exposure Limit</u>
Sodium nitrite	2 mg/m ³ TWA

Section 9: Physical and Chemical Properties (n.a. = not available)

- Appearance: Pale yellow liquid
- Odor: Mild, characteristic
- pH, neat: 9.6
- Specific Gravity: 1.17
- Water solubility: Complete
- Freezing/Boiling points, degrees F: < 32 / > 212
- Viscosity: < 100 cps
- Flash point, degrees F: non-flammable
- Upper/Lower explosive limits: non-flammable
- Auto-ignition temperature: non-flammable
- Decomposition temperature: n.a.
- Vapor pressure/density: n.a.
- Evaporation rate: n.a.
- Octanol/Water partition coefficient: n.a.

Section 10: Stability and Reactivity

Chemical Stability: This product is stable under normal storage and use conditions. Keep container closed and prevent exposure to temperature extremes.

Reactivity: This product will react with strong acid materials to form hazardous nitrogen oxide gases. Contact with amine compounds may produce carcinogenic nitrosamines.

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Section 11: Toxicological Information

Likely route(s) of exposure: eye/skin contact (irritation)

*Toxicity values are estimated using aggregate ingredient toxicities.

- Acute oral toxicity: LD₅₀, rat = 400 mg/kg
- Acute dermal toxicity: LD₅₀, rabbit = not available

Carcinogenicity/Teratogenicity: No ingredients listed by IARC, NTP, or OSHA.

Section 12: Ecological Information

a. Aquatic Toxicity

Freshwater fish, 96 hr LC₅₀, = 0.90 mg/l (estimated)

Daphnia magna, 48 hr EC₅₀, = not available

Product is expected to be highly toxic to aquatic organisms. Prevent spills from entering natural waterways and sewer systems.

b. Biodegradability

No specific biodegradability data have been determined for this product.

c. Environmental Fate

No data regarding environmental fate are available.

Section 13: Disposal Considerations

Personnel responding to spills of this product should wear splash shield, safety glasses, chemical-resistant coveralls, gloves, and boots.

Product should be used up, if possible, or stored in sealed plastic containers for proper disposal at a licensed waste facility.

Empty containers should be triple-rinsed with water prior to recycling or disposal.

Section 14: Transport Information

FOR TRANSPORT EMERGENCIES, CONTACT CHEMTREC, 1-800-424-9300

Proper shipping description: UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, PG III
(contains sodium nitrite)

DOT Hazard Class(es): Class 9

CERCLA Reportable Spill Quantity (RQ) = 500 lbs./45 gallons

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Section 15: Regulatory Information

<u>Regulation</u>	<u>Applicable</u>	<u>Notes</u>
OSHA Hazardous Material	Yes	Toxic
CERCLA Reportable Spill Quantity (RQ)	Yes	500 lbs.
EPCRA Section 302 Extremely Hazardous Substance	No	
EPCRA Section 311 Hazardous Material	Yes	Acute hazard
EPCRA Section 312 Hazardous Chemical Inventory	Yes	TPQ = 10,000 lbs.
EPCRA Section 313 Toxic Chemical	Yes	Sodium nitrite, 20%

Section 16: Additional Information

<u>HMIS Hazard Rating</u>	
Health	3
Flammability	0
Reactivity	0
Personal Protection	C

0 = minimal

1 = slight

2 = moderate

3 = serious

4 = severe

Code C = safety goggles, chemical-resistant gloves and apron