

Product Safety Data Sheet

Section 1: Identification

Product Name: BAS-200

Function: Oxygen scavenger for boiler systems

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: July 6, 2015

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Section 2: Hazard Identification





Hazard Classifications: Potentially hazardous dust/vapors, irritant, potential carcinogen

Signal Word: DANGER!

- MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED
- CAUSES EYE IRRITATION
- CAUSES MILD SKIN IRRITATION
- MAY BE HARMFUL IF SWALLOWED
- MAY CAUSE CANCER

Precautionary Statements:

- Contains sodium sulfite. Product vapors and dust may cause severe or deadly asthmatic reaction
 if inhaled by susceptible individuals.
- Use sulfur dioxide gas respirator if irritating fumes are present.
- Wear appropriate eye and skin protection.

Non-Classified Hazards: None

Section 3: Hazardous Ingredients

Ingredient Name	CAS Number	net % by weight
Sodium sulfite	7757-83-7	> 95
Cobalt sulfate	10124-43-3	< 0.2

Section 4: First Aid Procedures

- Skin Contact: Prolonged contact with skin may produce irritation. 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 moderate to severe irritation. Immediately flush eyes with water or ophthalmic rinse solution; continue flushing with water for 15 minutes to remove any residual material. Seek medical attention if irritation persists.
- Inhalation: Inhalation of product vapors or dusts may cause asthmatic response in sulfite-sensitive individuals. Move victim to fresh air. If breathing is difficult, provide oxygen and get immediate medical attention.
- Ingestion: Ingestion may result in gastrointestinal distress or life-threatening allergic reaction in sulfite-sensitive individuals. If victim is conscious, provide water or milk to dilute ingested material and induce vomiting. Get immediate medical attention.

Section 5: Fire-Fighting Measures

- Special Hazards: Thermal decomposition may produce hazardous SO_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.
- Prevent spills from contaminating natural waterways or municipal sewer systems.
- Sweep up or shovel as much spilled material as possible and return to original container. Flush spill residue with water to wastewater treatment system.

Section 7: Storage and Handling

- Store at room temperature away from acids. Keep container closed when not in use; prevent exposure to humidity.
- Use approved particulate respirator if use creates nuisance dust.
- > 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.

Section 8: Personal Protection and Exposure Controls

Protective Equipment Requirements:

- 1. Safety glasses or goggles
- 2. Chemical-resistant gloves
- 3. Chemical-resistant apron
- 4. Dust respirator (optional)

Airborne Exposure Limits

<u>Hazardous Ingredient</u> <u>Exposure Limit</u>

Cobalt sulfate 0.02 mg/m³ TWA

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

Appearance: Beige or faint pink powder

Odor: Odorless

pH, 5% solution: 9.8

Specific Gravity: 2.63 (solid)

Water solubility: 17% @ 50° F/28% @ 92° F

Freezing/Boiling points, degrees F: n.a. (solid)

Viscosity: n.a. (solid)

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 and humidity.

Reactivity: This product will react with strong acid materials to form toxic sulfur dioxide fumes; may also react with strong oxidizing compounds. Do not allow product to come in contact with acids.

Section 11: Toxicological Information

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

- \triangleright Acute oral toxicity: LD₅₀ = 2,610 6,400 mg/kg (sodium sulfite)
- ➤ Acute dermal toxicity: LD₅₀, rabbit = n.a.

Carcinogenicity/Teratogenicity: Product contains < 0.2% cobalt sulfate, which is considered "reasonably anticipated to be a human carcinogen" by NTP. IARC considers cobalt sulfate to be a Group 2B (suspected) carcinogen.

Section 12: Ecological Information

a. Aquatic Toxicity (sodium sulfite)

Western mosquito fish, 96 hr LC₅₀, = 460 mg/l

Daphnia magna, 48 hr LC₅₀, = 440 mg/l

Product will create short-term chemical oxygen demand in aquatic environment. Prevent spills from entering natural waterways and sewer systems.

b. Biodegradability

Product is inorganic and is not inherently biodegradable.

c. Environmental Fate

This product would be quickly oxidized and converted to sodium sulfate in natural waterways and soil; it is not expected to bioaccumulate.

Section 13: Disposal Considerations

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

Small amounts of waste product may be safely flushed with water to wastewater treatment system. Larger quantities 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: Compound, Boiler Preserving

DOT Hazard Class(es): Not Regulated

CERCLA Reportable Spill Quantity (RQ) = 500 lbs. (cobalt sulfate)

Section 15: Regulatory Information

Regulation	<u>Applicable</u>	<u>Notes</u>
OSHA Hazardous Material	Yes	Irritant
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	No	Cobalt sulfate is "de minimus"

Section 16: Additional Information

HMIS	Hazard	Rating

Health 2
Flammability 0
Reactivity 0
Personal Protection C

0 = minimal

1 = slight

2 = moderate

3 = serious

4 = severe

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