

Safety Data Sheet

FORMULA 2210-F

1. IDENTIFICATION

Product Name: FORMULA 2210-F

Revised: 12/1/2015

Chemical Name: Not Applicable

Description: Off white powder with characteristic odor

Recommended Use: Boiler Water Treatment

Restrictions on Use: For industrial use only. Not for use in treating drinking water or in USDA regulated facilities where product may contact meat and poultry products.

COMPANY IDENTIFICATION

EASTERN TECHNOLOGIES, INC.
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SUITE 105
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PHONE NUMBER: (610) 286-2010

EMERGENCY PHONE NUMBERS

CHEMTREC (800) 424-9300
Outside USA: CHEMTREC COLLECT (703) 527-3887

2. HAZARD(S) IDENTIFICATION

GHS Classification:

Serious eye damage/irritation - Category 1
Sensitization, skin - Category 1
Sensitisation, respiratory - Category 1B
Germ cell mutagenicity - Category 2
Carcinogenicity - Category 1B
Reproductive toxicity - Category 1B

Signal Word: Danger

Symbol(s):



Hazard Statements:

Causes serious eye damage
May cause an allergic skin reaction
May cause allergy or asthma symptoms or breathing difficulties if inhaled
Suspected of causing genetic defects
May cause cancer
May damage fertility or the unborn child

Precautionary Statements:

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dusts or mists. Wash hands, forearms, gloves and contaminated surfaces thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/eye protection/face protection. [In case of inadequate ventilation] wear respiratory protection.

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CONTROL CENTER or doctor for treatment advice.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CONTROL CENTER or doctor for treatment advice if you feel unwell.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CONTROL CENTER or doctor for treatment advice if you feel unwell.

If skin irritation or rash occurs: Get medical advice or attention. Specific treatment (see First Aid on SDS or on this label). Take off contaminated clothing and wash it before reuse.

If experiencing respiratory symptoms: Call a POISON CONTROL CENTER or doctor for treatment advice.

IF exposed or concerned: Call a POISON CONTROL CENTER or doctor for treatment advice.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal

Dispose of contents/container in accordance with local, regional, national and international regulations.

Hazards Not Otherwise Classified: None Known.

Percentages of Components with Unknown Acute Toxicity:

Dermal: 100%

Inhalation: 100%

3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL INGREDIENTS	CAS NO.*	PERCENT (%)**
SODIUM METABISULFITE	7681-57-4	2% - 8%
COBALT SULFATE	10124-43-3	(trace)
SODIUM SULFITE	7757-83-7	H

Legend: L=<1%; M=1-10%; H=>10%

* Exposure limit and regulatory information in Sections 8 & 15

** Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Eye Contact: Immediately flush with clean, cool water for 15 minutes and if irritation persists, get medical attention.

Skin Contact: Immediately wash skin with soap and plenty of water while removing contaminated clothing, for at least 15 minutes. If irritation persists, get medical attention. Launder contaminated clothing before reuse.

Inhalation: Remove victim to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek medical attention. If not breathing, give artificial respiration via a suitable mechanical device such as a bag and mask. Do not use mouth-to-mouth resuscitation.

Ingestion: Do not induce vomiting. Rinse mouth with copious quantities of water first and get immediate medical attention. Drink several glasses of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep airways clear.

Note to Physician: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

Most Important Symptoms/Effects:

Eye Contact: May cause severe irritation or burns. Prolonged contact may cause irreversible damage and/or blindness.

Skin Contact: Normally not an irritant. Avoid direct contact, prolonged or repeated contact with skin may cause irritation.

Inhalation: Inhalation of dust may be irritating. Material may aggravate persons with chronic respiratory disease.

Ingestion: May be toxic. May cause severe irritation or burns of the mouth, throat, and internal tissues resulting in possible nausea and/or vomiting. Large amounts can result in acute toxic effects which may be fatal.

Indication of Immediate Medical Attention and Special Treatment, if Necessary:

Other than acute, none known. See section 11 for toxicological information.

5. FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Any media suitable for the surrounding fire.

Specific Hazards Arising from the Chemical: Product may be irritating to the eyes, skin, and respiratory system. Closed containers may rupture (due to buildup of pressure) when exposed to extreme heat. Solid product will melt and combustion may occur when exposed to fire. Thermal decomposition may release oxides of sulfur and sodium sulfide which is flammable, a dangerous fire risk and a strong irritant to skin and tissues. Contact with acids will release sulfur dioxide gas which is toxic and corrosive.

Special Protective Equipment and Precautions for Fire-Fighters: Wear self-contained breathing apparatus and full turn-out gear. Approach fire from upwind direction. If possible, move containers away from fire. Cool fire exposed containers with water spray. If containers rupture or leak, product may evolve irritating or toxic gas under extreme heat. Contain runoff.

6. ACCIDENTAL RELEASE MEASURES

Spill Containment and Clean-up Instructions:

Wear suitable protective equipment found in section 8. Collect spilled material into suitable containers and dispose of in accordance with all local, state and federal requirements. The area may then be flushed with copious quantities of water. Floor may be slippery; use care to avoid falling. Avoid release of this product into the environment to prevent contamination of soil, sewers, natural waterways and/or groundwater. See Section 12 for Ecological Information.

7. HANDLING AND STORAGE

Handling and Storage:

Store in a cool, dry, well ventilated area, between 10°C and 49°C. Keep containers tightly closed when not in use and follow all recommended safety precautions when handling the material. Keep out of sun and away from heat or open flame. Keep away from incompatible materials. See Section 10 for incompatible materials.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls: General ventilation expected to be satisfactory

PERSONAL PROTECTION EQUIPMENT

Respiratory: Not normally required unless dusting occurs. Wear NIOSH approved dust respirator

Eyes and Face: Chemical resistant goggles or face shield.

Hands and Skin: Chemical resistant rubber, neoprene latex or PVC

Other Protective Equipment: Eyewash station in area of use. Wear long sleeve shirt, long pants, and boots.

EXPOSURE GUIDELINES

Exposure Limits:

COMPONENT	TLV
SODIUM METABISULFITE	TWA 5 mg/m ³

COBALT SULFATE
0.1 mg/m³ TWA (OSHA PEL)

0.2 mg/m³ TWA (ACGIH) (as Co)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Off white powder with characteristic odor		
Odor Threshold:	N.D.	Vapor Pressure:	N.A.
pH (5% solution):	7.0 - 9.0	Vapor Density:	N.A.
Freeze Point:	N.A.	Specific Gravity(@22°C):	2.50 - 2.70
Boiling Point:	N.A.	Solubility in Water:	<12%
Flash Point:	None	Partition Coefficient:	N.D. (n-octanol/water)
		Auto-Ignition Temperature:	N.D.
Evaporation Rate:	N.A.	Decomposition Temperature:	N.D.
Flammability (solid, gas):	No	Viscosity:	N.D.
Flammable Limits in Air:	LFL – N.A.		
	UFL – N.A.		

10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive at normal temperatures and pressure.

Chemical Stability: Stable under normal conditions

Possibility of Hazardous Reactions: Will not occur under normal conditions.

Conditions to Avoid: Avoid water, excessive heat, sparks or open flames.

Incompatible Materials: Concentrated acids or oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may release oxides of sulfur and sodium sulfide which is flammable, a dangerous fire risk and a strong irritant to skin and tissues. Contact with acids will release sulfur dioxide gas which is toxic and corrosive.

11. TOXICOLOGICAL INFORMATION

Ingestion Testing: Rat, LD50: 2422 mg/kg*

*Calculated based on GHS acute toxicity formula.

Skin Testing: None established for this product.

Inhalation Testing: None established for this product.

CHRONIC TOXICITY DATA

Sensitization Testing: None established for this product.

Other Testing: None established for this product.

Routes of Exposure: Eyes, Ingestion, Inhalation, Skin.

Eye Contact: May cause severe irritation or burns. Prolonged contact may cause irreversible damage and/or blindness.

Skin Contact: Normally not an irritant. Avoid direct contact, prolonged or repeated contact with skin may cause irritation.

Inhalation: Inhalation of dust may be irritating. Material may aggravate persons with chronic respiratory disease.

Ingestion: May be toxic. May cause severe irritation or burns of the mouth, throat, and internal tissues resulting in possible nausea and/or vomiting. Large amounts can result in acute toxic effects which may be fatal.

Medical Conditions Aggravated by Exposure: Asthma, bronchitis, emphysema and other lung diseases and chronic nose, sinus and throat conditions. Skin irritation may be aggravated in individuals with existing skin disorders.

Chronic Effects from Repeated Overexposure: Other than short term effects, none established.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity Data:

Invertebrate: Daphnia magna, EC50/48hr: 368 mg/l

Fish: Mosquito fish, LC50/96hr: 276 mg/l

*Calculated based on GHS acute aquatic toxicity formula.

Product Fate Data: None established for this product.

Biodegradation Data: None established for this product.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of in accordance with local, regional, national and international regulations. Contact the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
Container Disposal: Triple rinse container (or equivalent) promptly after emptying and offer for reconditioning if appropriate. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal.

14. TRANSPORT INFORMATION

US DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION
 NOT REGULATED

VESSEL TRANSPORT (IMO/IMDG)
 NOT REGULATED

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

TSCA: All ingredients listed or exempt from listing.

CERCLA and/or SARA RQ: No ingredients listed in this section.

SARA Section 302 Hazard Class: No ingredients listed in this section.

SARA Section 311/312 Chemicals:

Acute Health Hazard: Yes

Chronic Health Hazard: Yes

Fire Hazard: No

Sudden Release of Pressure Hazard: No

Reactive Hazard: No

SARA Section 313 Chemicals: Cobalt sulfate (cobalt compounds) <0.2%

STATE REGULATIONS

This product contains cobalt sulfate which is known to the State of California to cause cancer.

16. OTHER INFORMATION

HAZARD RATING SUMMARY

Hazard Rating System: NFPA
 Health: 1
 Flammability: 0
 Reactivity: 0
 Special:

CODE TRANSLATION
 0 = Minimal Hazard
 1 = Slight Hazard
 2 = Moderate Hazard
 3 = Severe Hazard
 4 = Extreme Hazard

Other Precautions: This product has been designed for use in specific types of boiler water systems and should be used only in accordance with the instructions provided by the technical representative servicing the facility. The product contains only FDA approved ingredients for use in boilers where steam can contact food or edible products. This product is suitable for USDA applications, except meat and poultry products.

SDS REVISION SUMMARY

Revised Date	Revision Notes
12/1/2015	GHS Version 1.0: Supersedes: 11/24/14

ABBREVIATION CODE SUMMARY

N.A. – Not Applicable
 N/A – Not Available
 N.D. – Not Determined
 N.E. – None Established

Disclaimer: The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given.