

MATERIAL SAFETY DATA SHEET

Complies with OSHA's 29 CFR
1910.1200 and State Hazard
Communication Standards.

Water Engineering, Inc.
1574 County Road 10
Mead, NE 68041
1-800-476-5545

Emergency Response Number:
1-800-255-3924

SECTION 1:

PRODUCT IDENTITY : Formula 1510, Steam Boiler Treatment

DATE PREPARED : November 2000

UPDATED: January 2002

NFPA/HMIS HAZARD CODES

(MINIMAL=0; SLIGHT=1; MODERATE=2; SERIOUS=3; SEVERE=4)

Health:

3/3

Fire:

0/0

Reactivity:

1/1

Special:

J

DOT SHIP CLASS: CORROSIVE LIQUID, N.O.S. - CONTAINS SODIUM NITRITE

R.Q.

P.G. III

Emergency Response Guide Number: 60

SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

HAZARDOUS COMPONENTS	CAS#	OSHA/PEL	ACGIH/TLV	% BY WT.
Sodium Nitrite	7632-00-0	None Est. **	None Est. **	12-17%
Sodium Hydroxide 50%	1310-73-2	2 mg/M3 (ceiling)	2 mg/M3 (ceiling)	<1%

Remainder of the components comprise of non-hazardous proprietary information

*EPA Hazardous Substance (40 CFR 116).

**Supplier recommends 5 mg/M3 as respirable particulate.

SECTION 3: PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT: 212 °F
VAPOR PRESSURE: as water
VAPOR DENSITY: as water
SOLUBILITY IN WATER: complete

SPECIFIC GRAVITY: 1.05-1.15
PERCENT VOLATILE: 80 (water)
EVAPORATION RATE: as water
pH: 9.0-11.0

APPEARANCE/ODOR : Lt. Yellow liquid, slight odor.

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None

FLAMMABLE LIMITS: N/A

EXTINGUISHING MEDIA: Product will not burn.

SPECIAL FIRE FIGHTING PROCEDURES: None

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SECTION 5: REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: None

INCOMPATIBILITY: Do not mix with acids, will neutralize active ingredients.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition, as in fire, may release oxides of carbon or nitrogen if evaporated to dryness.

SECTION 6: HEALTH HAZARD DATA**ROUTES OF ENTRY AND SYMPTOMS OF EXPOSURE:****ACUTE EFFECTS:**

Eyes: May cause severe burns; possible permanent eye damage, even blindness.
 Skin: Irritant; prolonged contact may cause severe burns which may not be immediately painful or visible.
 Ingestion: Severe burns to mucous membranes of mouth, throat and digestive tract. Sodium Nitrite may cause temporary yellowing of skin with prolonged contact; moderate Sodium Nitrite oral LD50 (rat) 85 mg/kg.
 Not likely route.

CHRONIC EFFECTS: None in normal use. Nitrites can react with secondary amines to form carcinogenic nitrosamines.

CARCINOGENS: None listed under OSHA, IARC or NTP.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing dermatitis.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes: Flush with water for 15 minutes. Get medical attention.
 Skin: Wash thoroughly with soap and water. Remove contaminated clothing.
 Ingestion: DO NOT INDUCE VOMITING. Give water or milk to dilute. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE**SPILL OR LEAK PROCEDURES:**

Small Spills: Flush away with large amounts of water.
Large Spills: Dike to contain spill. Reclaim as much as possible. Absorb remainder with inert materials. Flush residue away with water. Prevent wash water from entering natural waterways or public water supplies.

Waste Disposal Method: Dispose of in accordance with Federal, State, and local regulations.
 Product if disposed of as received is a RCRA characteristic corrosive waste due to its pH.
Handling and Storage: Read label before using. Do not contaminate food or feed by use or storage of this product.
 Keep from freezing.
Other Precautions: Avoid skin and eye contact. Keep out of reach of children.
 Read and follow label instructions.

SECTION 8: CONTROL MEASURES

RESPIRATORY PROTECTION: Use NIOSH approved dust or mist respirator if mist in air causes irritation or exceeds exposure limits.
VENTILATION: Normally none required. Mechanical exhaust as needed if mist in air.
GLOVES: Rubber or neoprene
EYE PROTECTION: Splash proof goggles or chemical safety glasses.
OTHER PROTECTIVE EQUIPMENT: As needed to prevent prolonged or repeated skin contact.
WORK/HYGENIC PRACTICES: Wash thoroughly after handling. Launder contaminated clothing before reuse.

SECTION 9: SARA TITLE III REGULATORY INGREDIENT INFORMATION

1. Title III Section 302/304 Extremely Hazardous Substance List and/or CERCLA Hazardous Substance List.

Component:	Sodium Nitrite	Sodium Hydroxide 50%
CAS #:	7632-00-0	1310-73-2
Percent:	12-17%	<1%
T.P.Q.:	100 lbs.	1,000 lbs.
R.Q.:	100 lbs.	1,000 lbs.

2. Title III Section 313 Toxic Chemicals Annual Release Reporting Requirements (SARA Section 313 Toxic Chemicals List).

Component:	Sodium Nitrite	Sodium Hydroxide 50%
CAS #:	7632-00-0	1310-73-2
Percent:	12-17%	<1%

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