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 Treatme	ent			
DATE PREPARED: UPDATED:	November 2000 January 2002					
NFPA/HMIS HAZARD CO	DES (MINIMAL=0	; SLIGHT=1; MOD	ERATE=2; SERIOUS=3;	SEVERE=4)		
Health:	Fire:	R	eactivity:	Special:		
3/3	0/0		1/1	J		
DOT SHIP CLASS:	CORROSIVE LIQUID,	N.O.S CONT	AINS SODIUM NITIRI	TE		
	R.Q.		P.G. III			
Emergency Response G	uide Number:	60				
SECTION 2: HAZARD	OUS INGREDIENTS	/ IDENTITY I	NFORMATION			
HAZARDOUS COMPONE	NTS	CAS#	OSHA/PEI		ACGIH/TLV	<u>% BY WT.</u>
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 of	comprise of non-hazardous pr	oprietary informatio	1 01.			

*EPA Hazardous Substance (40 CFR 116).

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

SECTION 3: PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT:	212 °F	SPECIFIC GRAVITY:	1.05-1.15
VAPOR PRESSURE:	as water	PERCENT VOLATILE:	80 (water)
VAPOR DENSITY:	as water	EVAPORATION RATE	: as water
SOLUBILITY IN WATER:	complete	pH: 9.0-11.0	

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

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None

EXTINGUISHING MEDIA: Product will not burn.

SPECIAL FIRE FIGHTING PROCEDURES: None

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SECTION 5: REACTIVITY DATA

STABILITY: CONDITIONS TO AVOID: INCOMPATIBILITY: HAZARDOUS DECOMPOSITION PRODUCTS:

Stable None Do not mix with acids, will neutralize active ingredients. Thermal decomposition, as in fire, may release oxides of carbon or nitrogen if evaporated to dryness.

FLAMMABLE LIMITS: N/A

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; moderal 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 mush 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.

1310-73-2 <1%

> 1,000 lbs. 1,000 lbs.

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 reu		

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%

Component:	Sodium Nitrite	
CAS #:	7632-00-0	
Percent:	12-17%	
T.P.Q.:	100 lbs.	
R.Q.:	100 lbs.	

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

 Component:
 Sodium Nitrite

 CAS #:
 7632-00-0

 Percent:
 12-17%

AS THE CONDITIONS OF METHODS OR USE ARE BEYOND OUR CONTROL, WE DO NOT ASSUME ANY RESPONSIBILITY AND EXPRESSLY DISCLAIM ANY LIABILITY FOR ANY USE OF THIS MATERIAL. THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE TRUE AND ACCURATE BUT ALL STATEMENTS OR SUGGESTIONS ARE MADE WITHOUT WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THIS INFORMATION, THE HAZARDS CONNECTED WITH THE USE OF THE MATERIAL OR RESULTS TO BE OBTAINED FROM THE USE THEREOF. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS REMAIN THE RESPONSIBILITY OF THE USER.