## MATERIAL SAFETY DATA SHEET

**Total Solutions** P.O. Box 240014 Milwaukee, WI 53224

REVISION DATE: June 24, 2004 DATE OF ISSUE: July 1, 2004

GENERAL INFORMATION NUMBER: (414) 354-6417

CHEMTREC: (800) 424-9300

#### I - Product Identification

## **Boiler Treat "H"**

**PRODUCT CODE: 0903** 

CHEMICAL FORMULATION: Steam boiler water treatment

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 2

FLAMMABILITY: 0 REACTIVITY: 0 4 - Extreme; 3 - High; **HAZARD RATING:** 2 - Moderate; 1 - Slight; 0 - Insignificant

### **II - Hazardous Ingredients**

	Values reported as TWA unless noted.						
	APPROX OSHA ACGI			EPA 40 CFR:			
<b>SUBSTANCE</b>	<u>%</u>	<u>PEL</u>	$\underline{\mathbf{TLV}}$	<u>302</u>	<u>355</u>	<u>372</u>	CAS#
Sodium hydroxide	1.00-5.00	$2 \text{ mg/m}^3$	$2 \text{ mg/m}^3 \text{ C}$	Y	N	N	1310-73-2
Potassium carbonate	5.00-10.0	N/E	N/E	N	N	N	584-08-7

**TLV:** Threshold Limit Value C: Ceiling level **STEL**: Short Term Exposure Limit Key: **PEL**: Permissible Exposure Limit N/E: Not Established Y: Yes N: No

N/A: Not Applicable N/D: Not Determined

302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).

355: SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).

372: SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

#### **III - Physical Data**

**BOILING POINT (°F): N/D SPECIFIC GRAVITY (WATER = 1):** 1.10 VAPOR PRESSURE (mm Hg): N/D VOC CONTENT (% by weight): N/D **EVAPORATION RATE (WATER = 1):** N/D VAPOR DENSITY (AIR = 1): N/D

**SOLUBILITY IN WATER:** Soluble **pH:** 13.5 - 14.0

APPEARANCE AND ODOR: Clear, dark brown liquid; characteristic odor.

#### IV - Fire and Explosion Hazard Data

FLASH POINT (°F): None (TEST METHOD): Closed cup FLAMMABLE LIMITS IN AIR (VOLUME %) LOWER: N/A **UPPER:** N/A

**EXTINGUISHING MEDIA:** Water, foam, carbon dioxide, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Cool fire exposed containers with water fog. Firefighters should be equipped with full protective gear including self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARD: None

#### V - Reactivity Data

**STABILITY:** Stable

**INCOMPATIBILITY:** Strong acids. **CONDITIONS TO AVOID:** None.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur.

**CONDITIONS TO AVOID: None** 

#### VI - Health Hazard Data

ROUTES OF ENTRY INHALATION: X EYE CONTACT: X SKIN CONTACT: X INGESTION: X INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS: None. EFFECTS OF OVEREXPOSURE

**IF IN EYES:** Severe irritation, redness, tearing, destruction of tissue.

**IF ON SKIN:** Redness, irritation, burns with prolonged or repeated exposure.

IF SWALLOWED: Gastrointestinal irritation, cramps, burns to mucous membranes, Harmful or fatal if swallowed.

**IF INHALED:** Severe irritation of respiratory tract, pulmonary edema, laryngeal spasms.

#### EMERGENCY AND FIRST AID PROCEDURES

**IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.

**IF ON SKIN:** Flush area with water while removing contaminated clothing. Continue flushing for at least 15 minutes. Launder clothing separately before re-use. If irritation persists, obtain medical attention.

**IF SWALLOWED:** Contact physician or poison control center immediately. Rinse mouth with water and give affected person 1 to 2 glasses of water. Do not induce vomiting unless instructed by a physician of poison control center. Never give anything to an unconscious person.

**IF INHALED:** Remove person to fresh air. If breathing has stopped, perform artificial respiration. If breathing is difficult, administer oxygen. Obtain medical attention.

# VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area. Contain spill. Soak up spilled material with inert absorbent material and place in a properly marked closed container for proper disposal.

WASTE DISPOSAL METHOD: Consult local environmental authorities.

#### **VIII - Special Protection Information**

**RESPIRATORY PROTECTION:** Use with adequate ventilation. If recommended Exposure Limits are exceeded wear a NIOSH approved respirator, following manufacturer's recommendations.

VENTILATION LOCAL: Recommended MECHANICAL: Not required

**PROTECTIVE GLOVES:** Chemical resistant.

**EYE PROTECTION:** Safety glasses or chemical goggles.

**OTHER PROTECTIVE EQUIPMENT:** Protective clothing, emergency shower and eye wash station.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry place away from acidic material. Keep container tightly closed when not in use. Always add this product to water, never add water to this product.

OTHER PRECAUTIONS: Keep out of reach of children.

#### IX - Transportation Information (ground transportation only)

**DOT PROPER SHIPPING NAME:** Corrosive liquids, n.o.s.. (sodium hydroxide) **DOT CLASS:** 8 **DOT ID NUMBER:** UN1760

**DOT PACKING GROUP: II** 

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

REVISION DATE: June 24, 2004 Prepared by: PMR DATE OF ISSUE: July 1, 2004

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Total Solutions assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material such vendees or users assume all risks associated with the use of this material.