

# MATERIAL SAFETY DATA SHEET

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



GENERAL INFORMATION NUMBER: (414) 354-6417  
CHEMTREC: (800) 424-9300

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

## I - Product Identification

### Alka-Treat

PRODUCT CODE: 1965

CHEMICAL FORMULATION: Steam boiler treatment.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 3

FLAMMABILITY: 0

REACTIVITY: 0

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

## II - Hazardous Ingredients

Values reported as TWA unless noted.

SUBSTANCE	APPROX	OSHA	ACGIH	EPA 40 CFR:			CAS #
	%	PEL	TLV	302	355	372	
Sodium Hydroxide	20.0-30.0	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup> C	Y	N	N	1310-58-3

Key: PEL: Permissible Exposure Limit TLV: Threshold Limit Value C: Ceiling level STEL: Short Term Exposure Limit  
N/A: Not Applicable N/D: Not Determined N/E: Not Established Y: Yes N: No  
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): 1.25  
VAPOR PRESSURE (mm Hg): N/D VOC CONTENT (% by weight): N/D  
VAPOR DENSITY (AIR = 1): N/D EVAPORATION RATE (WATER = 1): N/D  
SOLUBILITY IN WATER: Soluble pH: 13.00-14.00  
APPEARANCE AND ODOR: Clear, colorless liquid; characteristic odor.

## IV - Fire and Explosion Hazard Data

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

**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:** Corrosive-Severe irritation and destruction of tissue.

**IF ON SKIN:** Corrosive-Severe irritation, burns, defatting, destruction of tissue.

**IF SWALLOWED:** DANGER-Harmful or fatal if swallowed. Severe burns to mucous membranes.

**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. Obtain immediate medical attention and continue flushing until assistance arrives.

**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 irritation persists, obtain medical attention. If breathing has stopped, administer artificial respiration. If breathing is difficult, give oxygen.

---

**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 labeled closed container.

**WASTE DISPOSAL METHOD:** Consult local environmental authorities.

---

**VIII - Special Protection Information**

---

**RESPIRATORY PROTECTION:** Use with adequate ventilation. Do not breathe vapors or mists. 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:** Chemical goggles or face shield.

**OTHER PROTECTIVE EQUIPMENT:** Protective clothing 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.