

Material Safety Data Sheet

Hazard Rating:	NFPA	CODE TRANSLATION
Health:	1	0 = Minimal Hazard
Flammability:	0	1 = Slight Hazard
Reactivity:	0	2 = Moderate Hazard
Special:		3 = Severe Hazard
		4 = Extreme Hazard

FORMULA 2045-F

SECTION I: IDENTIFICATION

Effective Date: 5/20/94

Revised: AUGUST 31, 2003

Name and Address:

Phone:

Emergency Phone: CHEMTREC (800) 424-9300

Chemical Name: NOT APPLICABLE

Formula: SEE SECTION II

Synonyms: N.A.

Chemical Family: BOILER WATER TREATMENT

D.O.T. Hazard Class: NONE

ID No.: NONE

D.O.T. Shipping Name: NONE

SECTION II: INGREDIENTS

A. Hazardous Ingredients	CAS NO.	%	TLV
POTASSIUM HYDROXIDE (as K ₂ O)	1310-58-3	<1.0	2mg/m ³
B. Other Ingredients		%*	TLV
ACRYLIC COPOLYMER ESTER		H	NONE ESTAB.
HYDROXYETHYLIDINE DIPHOSPHONATE ESTER		M	NONE ESTAB.

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

SECTION III: PHYSICAL PROPERTIES

Boiling Point: >212°F	Specific Gravity: 1.093-1.101
Percent Volatile (volume): >70	pH (10% solution): 12.1 ± 0.3
Vapor Pressure (mm Hg): N.A.	Solubility in Water: COMPLETE
Vapor Density (air=1): <1	Evaporation Rate (water=1): 1.0
Appearance and Odor: LIGHT YELLOW LIQUID WITH CHARACTERISTIC ODOR	

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

Flash Point (method used): NONE

Flammable Limits in Air (lower): N.A.

(upper): N.A.

Extinguishing Media: ANY MEDIA SUITABLE FOR THE SURROUNDING FIRE

Special Fire Fighting Procedures: FIREFIGHTERS SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT. SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED IN CONFINED AREAS.

Unusual Fire or Explosion Hazards: NONE KNOWN

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SECTION V: HEALTH HAZARD DATA

- A. TLV and Source: CALCULATED >200 ppm BASED ON K₂O CONCENTRATION
- B. Effects of a Single Overexposure by:
1. Ingestion: MAY BE TOXIC. DUE TO HIGH pH, MAY CAUSE SEVERE IRRITATION TO INTERNAL TISSUES.
 2. Inhalation: NOT A LIKELY ROUTE OF EXPOSURE.
 3. Skin Contact: PROLONGED CONTACT MAY CAUSE IRRITATION.
 4. Eye Contact: CAUSES SEVERE IRRITATION OR BURNS.
- C. Effects of Repeated Overexposures: OTHER THAN SHORT TERM EFFECTS, NONE KNOWN.
- D. Emergency and First Aid Procedures for:
1. Ingestion: DRINK SEVERAL GLASSES OF WATER AND GET IMMEDIATE MEDICAL ATTENTION. DO NOT INDUCE VOMITING.
 2. Inhalation: N.A.
 3. Skin Contact: WASH WITH SOAP AND WATER OR PLAIN WATER.
 4. Eye Contact: IMMEDIATELY FLUSH WITH CLEAR WATER FOR 15 MINUTES AND IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.
- E. Other Health Information: NONE KNOWN

SECTION VI: PERSONNEL PROTECTION DATA

Respiratory Protection: NOT NORMALLY REQUIRED
Ventilation: NORMAL VENTILATION SATISFACTORY

Protective Gloves: OPTIONAL
Eye Protection: GOGGLES OR FACE SHIELD

Other Protective Equipment: EYEWASH STATION IN AREA OF USE.

SECTION VII: REACTIVITY DATA

- A. Product Stability: STABLE
Conditions to Avoid: NONE KNOWN
- B. Incompatibility: CONCENTRATED ACIDS OR OXIDIZING AGENTS
- C. Hazardous Combustion or Decomposition Products: OXIDES OF CARBON AND NITROGEN MAY BE RELEASED IF WATER IS EVAPORATED BY THE HEAT OF A FIRE.
- D. Hazardous Polymerization: WILL NOT OCCUR
Conditions to Avoid: NONE KNOWN

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SECTION VIII: ENVIRONMENTAL DATA

- A. Spill or Leak Procedures: SMALL SPILLS MAY BE FLUSHED WITH COPIOUS QUANTITIES OF WATER, PREFERABLY TO A SANITARY SEWER OR WASTE TREATMENT FACILITY. LARGER SPILLS MAY BE ABSORBED IN SAWDUST OR OTHER ABSORBENT AND SWEEPINGS DISPOSED OF IN AN APPROVED LANDFILL.
- B. Waste Disposal: SMALL QUANTITIES MAY BE DILUTED WITH WATER AND FLUSHED TO A SANITARY SEWER. LARGER QUANTITIES MAY BE BURIED IN AN APPROVED LANDFILL. HOWEVER, OBEY ALL FEDERAL, STATE OR LOCAL REGULATIONS.
- C. Other Environmental Data: CALCULATED AQUATIC TOXICITY FOR THE PRODUCT >1000ppm BASED ON THE MOST TOXIC INGREDIENT KNOWN IN THE PRODUCT.

SECTION IX: SPECIAL PRECAUTIONS

- A. Handling and Storage: STORE IN A COOL DRY PLACE. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE.
- B. 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. IT MAY NOT BE USED FOR THE TREATMENT OF POTABLE WATERS. THE PRODUCT CONTAINS ONLY INGREDIENTS APPROVED BY THE FDA FOR USE IN BOILERS WHERE STEAM CAN CONTACT FOOD OR OTHER EDIBLE PRODUCTS AND IS USDA REGISTERED (application pending).

The data contained in this Material Safety Data Sheet has been prepared based upon an evaluation of the ingredients contained in the product, their concentration in the product and potential interactions. The information is offered in good faith and is believed to be accurate. It is furnished to the customer who is urged to study it carefully to become aware of hazards, if any, in the storage, handling, use and disposal of the product; and to insure his employees are properly informed and advised of all safety precautions required. The information is furnished to comply with the "Occupational Safety and Health Act" (OSHA) hazard communication regulation [Rule 29 CFR 1910.1220 (g) (2)]. Use or dissemination of all or part of this information for any other purpose is not permitted.