

Material Safety Data Sheet

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

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SECTION I: IDENTIFICATION

Effective Date: 8/15/86
Name and Address:

Revised: JULY 31, 2003
Phone:
Emergency Phone: CHEMTREC (800) 424-9300

Chemical Name: NOT APPLICABLE

Formula: SEE SECTION II

Synonyms: N.A.

Chemical Family: COOLING WATER TREATMENT

D.O.T. Shipping Name: CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS SODIUM HYDROXIDE)

D.O.T. Hazard Class: 8

ID No.: UN-1719

Packing Group: PG-II (ERG-60)

SECTION II: INGREDIENTS

A. Hazardous Ingredients	CAS NO.	%	TLV
CAUSTIC SODA (AS Na ₂ O)	1310-73-2	<4.0	2mg/m ³ /15M
B. Other Ingredients		%*	TLV
GLUCONIC ACID ESTER		H	NONE ESTAB.
HYDROXYETHYLIDENE PHOSPHONATE ESTER		M	NONE ESTAB.
SULFONATED COPOLYMER ESTER		M	NONE ESTAB.
TOLYLTRIAZOLE ESTER		M	NONE ESTAB.

*Legend: L=<2%; M=2-20%; H=>20%

SECTION III: PHYSICAL PROPERTIES

Boiling Point: >212°F
Percent Volatile (volume): >60
Vapor Pressure (mm Hg): N.A.
Vapor Density (air=1): <1
Appearance and Odor: YELLOW LIQUID WITH CHARACTERISTIC ODOR

Specific Gravity: 1.216-1.224
pH (10% solution): 12.9 ± 0.3
Solubility in Water: COMPLETE
Evaporation Rate (water=1): 1.0

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

Flash Point (method used): NONE
Flammable Limits in Air (lower): N.A.

(upper): N.A.

Extinguishing Media: FLOOD WITH WATER. HEAVY WATER JET ADVANTAGEOUS.

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: NONE ESTABLISHED FOR THIS PRODUCT. REFER TO SECTION II.
- 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 SEVERE IRRITATION OR BURNS.
 4. Eye Contact: MAY CAUSE SEVERE BURNS AND POSSIBLE BLINDNESS.
- 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: CHEMICAL RESISTANT
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: ACIDS, STRONG 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: SPILLS MAY BE FLUSHED WITH COPIOUS QUANTITIES OF WATER TO A SANITARY SEWER OR WASTE TREATMENT FACILITY.
- B. Waste Disposal: SMALL QUANTITIES MAY BE DILUTED WITH WATER AND FLUSHED TO A SANITARY SEWER. LARGER QUANTITIES MAY BE SUBJECT TO FEDERAL, STATE OR LOCAL REGULATIONS CONSULT APPROPRIATE REGULATING AGENCIES BEFORE DISPOSING OF WASTE MATERIAL.
- C. Other Environmental Data: THE AQUATIC TOXICITY HAS NOT BEEN DETERMINED FOR THIS PRODUCT. REFER TO SECTION II.

SECTION IX: SPECIAL PRECAUTIONS

- A. Handling and Storage: STORE IN A COOL DRY PLACE. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. STORE AWAY FROM ACIDS AND OTHER INCOMPATIBLE MATERIALS.
- B. Other Precautions: THIS PRODUCT HAS BEEN DESIGNED FOR CLEANING SPECIFIC TYPES OF COOLING WATER CIRCUITS AND SHOULD BE USED ONLY IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED BY THE TECHNICAL REPRESENTATIVE SERVICING THE FACILITY. IT SHOULD BE FLUSHED FROM THE SYSTEM PRIOR TO THE START UP OF THE TREATMENT PROGRAM.

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.