

# Material Safety Data Sheet

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

## FORMULA 2261

### SECTION I: IDENTIFICATION

Effective Date: 9/30/89

Revised: SEPTEMBER 30, 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. 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                     |
|---|-----------|------|-------------------------|
| SODIUM HYDROXIDE (AS Na <sub>2</sub> O) | 1310-73-2 | <1.0 | 2mg/m <sup>3</sup> /15M |
| B. Other Ingredients                    |           | %*   | TLV                     |
| SULFITE SALT                            |           | M    | NONE ESTAB.             |
| CARBOXYLATED METHACRYLIC ESTER          |           | M    | NONE ESTAB.             |
| SULFONATED COPOLYMER ESTER              |           | M    | NONE ESTAB.             |
| ORTHOPHOSPHATE SALT                     |           | L    | NONE ESTAB.             |
| ORGANIC CHELATING ESTER                 |           | L    | NONE ESTAB.             |
| POLYOXYETHYLENE GLYCOL (MW >1500)       |           | L    | NONE ESTAB.             |

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

### SECTION III: PHYSICAL PROPERTIES

Boiling Point: >212°F

Specific Gravity: 1.118-1.126

Percent Volatile (volume): >85

pH (10% SOLUTION): >13.0 ± 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: COLORLESS 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: WATER OR ANY MEDIA SUITABLE FOR THE SURROUNDING FIRE.

Special Fire Fighting Procedures: FIREFIGHTERS SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT. SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED FOR CONFINED AREAS.

Unusual Fire or Explosion Hazards: NONE KNOWN

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### SECTION V: HEALTH HAZARD DATA

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A. TLV and Source: CALCULATED >200ppm BASED ON THE Na<sub>2</sub>O CONTENT.

B. Effects of a Single Overexposure by:

1. Ingestion: MAY BE TOXIC. INGESTION MAY CAUSE SEVERE IRRITATION OF GASTROINTESTINAL TRACT AND SEVERE ALLERGIC REACTIONS IN SOME ASTHMATICS. LARGE DOSES MAY CAUSE VIOLENT COLIC AND DIARRHEA, CIRCULATORY DISTURBANCES, AND CENTRAL NERVOUS SYSTEM DEPRESSION.
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 INDUCE VOMITING BY STICKING A FINGER DOWN THE THROAT. GET IMMEDIATE MEDICAL ATTENTION.
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

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### SECTION VI: PERSONNEL PROTECTION DATA

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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.

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### SECTION VII: REACTIVITY DATA

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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, NITROGEN, AND SULFUR 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

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- 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 >800ppm.

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### SECTION IX: SPECIAL PRECAUTIONS

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- 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 IS NOT APPROVED FOR USE IN BOILERS WHERE STEAM CAN CONTACT FOOD OR OTHER EDIBLE PRODUCTS.

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.