# Safety Data Sheet

**Issue Date:** 01-Jun-2010 **Revision Date:** 23-Apr-2015 **Version** 1

## 1. IDENTIFICATION

**Product Identifier**
**Product Name** Boiler Water Treatment

**Other means of identification**
**SDS #** BL-160

**UN/ID No**

**Recommended use of the chemical and restrictions on use**
**Recommended Use** Steam Boiler Treatment.

**Details of the supplier of the safety data sheet**
**Manufacturer Address**
Atlantic Chemical & Equipment Company
3471 Atlanta Industrial Parkway
Suite 200
Atlanta, GA 30331 USA

**Emergency Telephone Number**
**Company Phone Number** 404-505-6626
1-800-929-2436
**Emergency Telephone (24 hr)** Chemtrec 1-800-424-9300 (USA) 1-800-567-7455 (International)

## 2. HAZARDS IDENTIFICATION

**Appearance** Dark brown liquid **Physical State** Liquid **Odor** Musty

**Classification**

| | |
|---|---|
| Skin corrosion/irritation | Category 1 Sub-category C |
| Serious eye damage/eye irritation | Category 1 |

**Signal Word**
**Danger**

**Hazard Statements**
Causes severe skin burns and eye damage

**Precautionary Statements - Prevention**
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a poison center or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
If skin irritation persists: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a poison center or doctor/physician
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
Immediately call a poison center or doctor/physician

**Precautionary Statements - Storage**
Store locked up

**Precautionary Statements - Disposal**
Dispose of contents/container to an approved waste disposal plant

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No | Weight-% |
|---|---|---|
| Sodium Sulfite | 7757-83-7 | <4 |
| Potassium hydroxide | 1310-58-3 | 4 |

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

## 4. FIRST-AID MEASURES

**First Aid Measures**

**Eye Contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

**Skin Contact** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If irritation persists, seek medical attention.

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Immediately call a poison center or doctor/physician.

**Ingestion** Rinse mouth. Drink plenty of water. Do not induce vomiting. Immediately call a poison center or doctor/physician.

**Most important symptoms and effects**

**Symptoms** Causes severe skin burns and eye damage. Inhalation of mists can cause irritation of respiratory system and possible destruction of tissues; possible effect on oxygen carrying ability of blood. Ingestion may cause gastric distress.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**
Fire may produce irritating and/or toxic gases.

**Hazardous Combustion Products** Carbon monoxide. Carbon dioxide (CO2). Sulfur dioxide gas.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protection recommended in Section 8.

**Environmental Precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Neutralize solution with a dilute acid. Contain and collect with an inert absorbent and place into an appropriate container for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Keep containers closed when not in use. Follow all product label instructions. Use only as directed.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up.

**Packaging Materials** Do not store in aluminum drums.

**Incompatible Materials** Acids. Acid products. Soft metals such as aluminum and zinc.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Potassium hydroxide<br>1310-58-3 | Ceiling: 2 mg/m$^3$ | (vacated) Ceiling: 2 mg/m$^3$ | Ceiling: 2 mg/m$^3$ |

**Appropriate engineering controls**

**Engineering Controls** Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Chemical goggles or full face shield.

**Skin and Body Protection** Chemical resistant rubber or plastic gloves.

**Respiratory Protection** In misty conditions, wear NIOSH approved high efficiency particulate respirator.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | | | |
|---|---|---|---|
| **Physical State** | Liquid | | |
| **Appearance** | Dark brown liquid | **Odor** | Musty |
| **Color** | Dark brown | **Odor Threshold** | Not determined |

| Property | Values | Remarks • Method |
|---|---|---|
| **pH** | 13.5 | |
| **Melting Point/Freezing Point** | Not applicable | |
| **Boiling Point/Boiling Range** | 132.7 °C / 271 °F | |
| **Flash Point** | None | |
| **Evaporation Rate** | 1 | (Water = 1) |
| **Flammability (Solid, Gas)** | Liquid-Not applicable | |
| **Upper Flammability Limits** | Not determined | |
| **Lower Flammability Limit** | Not determined | |
| **Vapor Pressure** | 39 mm Hg | @ 60°C |
| **Vapor Density** | 1.0 | (Air=1) |
| **Specific Gravity** | 1.151 | (Water = 1) |
| **Water Solubility** | Completely soluble | |
| **Solubility in other solvents** | Not determined | |
| **Partition Coefficient** | Not determined | |
| **Auto-ignition Temperature** | Not determined | |
| **Decomposition Temperature** | Not determined | |
| **Kinematic Viscosity** | Not determined | |
| **Dynamic Viscosity** | Not determined | |
| **Explosive Properties** | Not determined | |
| **Oxidizing Properties** | Not determined | |

## 10. STABILITY AND REACTIVITY

**Reactivity**
Not reactive under normal conditions.

**Chemical Stability**
Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**
None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Conditions to Avoid**
Keep separated from incompatible substances. Keep out of reach of children.

**Incompatible Materials**
Acids. Acid products. Soft metals such as aluminum and zinc.

**Hazardous Decomposition Products**
Carbon monoxide. Carbon dioxide (CO2). Sulfur dioxide gas.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

**Eye Contact** Causes severe eye damage.

**Skin Contact** Causes severe skin burns.

**Inhalation** Avoid breathing vapors or mists.

**Ingestion** Do not ingest.

**Component Information**

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Sodium Sulfite<br>7757-83-7 | = 820 mg/kg ( Rat ) | - | > 22 mg/L ( Rat ) 1 h |
| Potassium hydroxide<br>1310-58-3 | = 284 mg/kg ( Rat ) | - | - |

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** Group 3 IARC components are "not classifiable as human carcinogens".

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| Sodium Sulfite<br>7757-83-7 | | Group 3 | | |

**Numerical measures of toxicity**
Not determined

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Component Information**

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Sodium Sulfite<br>7757-83-7 | | 220 - 460: 96 h Leuciscus idus mg/L LC50 static | | 330: 24 h Psammechinus miliaris mg/L LC50 |
| Potassium hydroxide<br>1310-58-3 | | 80: 96 h Gambusia affinis mg/L LC50 static | | |

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

| Chemical Name | Partition Coefficient |
|---|---|
| Sodium Sulfite<br>7757-83-7 | -4 |
| Potassium hydroxide<br>1310-58-3 | 0.65<br>0.83 |

**Other Adverse Effects**

Not determined

## 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

**Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

| Chemical Name | California Hazardous Waste Status |
|---|---|
| Potassium hydroxide<br>1310-58-3 | Toxic<br>Corrosive |

## 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

**UN/ID No** NA
**Proper Shipping Name**
**Hazard Class**
**Packing Group**

**IATA**

**UN/ID No** NA
**Proper Shipping Name**
**Hazard Class**
**Packing Group**

**IMDG**

**UN/ID No** NA
**Proper Shipping Name**
**Hazard Class**
**Packing Group**

## 15. REGULATORY INFORMATION

**International Inventories**

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|---|---|---|---|---|---|---|---|---|---|---|
| Sodium Sulfite | Present | X | | Present | | Present | X | Present | X | X |
| Potassium hydroxide | Present | X | | Present | | Present | X | Present | X | X |

**Legend:**

***TSCA*** *- United States Toxic Substances Control Act Section 8(b) Inventory*

***DSL/NDSL*** *- Canadian Domestic Substances List/Non-Domestic Substances List*

***EINECS/ELINCS*** *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

***ENCS*** *- Japan Existing and New Chemical Substances*

***IECSC*** *- China Inventory of Existing Chemical Substances*

***KECL*** *- Korean Existing and Evaluated Chemical Substances*

***PICCS*** *- Philippines Inventory of Chemicals and Chemical Substances*

***AICS*** *- Australian Inventory of Chemical Substances*

**US Federal Regulations**

**CERCLA**

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---|---|---|---|
| Potassium hydroxide<br>1310-58-3 | 1000 lb | | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|---|---|---|---|
| Potassium hydroxide | 1000 lb | | | X |

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| Potassium hydroxide<br>1310-58-3 | X | X | X |

## 16. OTHER INFORMATION

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health Hazards** | **Flammability** | **Instability** | **Special Hazards** |
| | Not determined | Not determined | Not determined | Not determined |
| **HMIS** | **Health Hazards** | **Flammability** | **Physical Hazards** | **Personal Protection** |
| | 2 | 0 | 0 | Not determined |

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**Revision Note:** New format

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**