Safety Data Sheet

Issue Date: 01-Jun-2010 **Revision Date:** 08-Apr-2015 **Version** 1

1. IDENTIFICATION

Product Identifier

Product Name Boiler Water Treatment

Other means of identification

SDS # BL-504S

UN/ID No UN1814

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 Brown liquid **Physical State** Liquid **Odor** Tree bark-like odor

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-%
Potassium hydroxide	1310-58-3	>9

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. Immediately call a poison center or doctor/physician.

Ingestion Rinse mouth. Do not induce vomiting. Drink plenty of water. 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 pain, nausea, and 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.

Incompatible Materials Acids. Acid products. Soft metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 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	Brown liquid	**Odor**	Tree bark-like odor
Color	Brown	**Odor Threshold**	Not determined

Property	Values	Remarks • Method
pH	13.5	
Melting Point/Freezing Point	Not applicable	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	Not combustible	
Evaporation Rate	1	(Water = 1)
Flammability (Solid, Gas)	Liquid-Not applicable	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	17 mm Hg	
Vapor Density	1	(Air=1)
Specific Gravity	1.23	(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.

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

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
Potassium hydroxide 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 Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

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
Potassium hydroxide 1310-58-3		80: 96 h Gambusia affinis mg/L LC50 static		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Potassium hydroxide 1310-58-3	0.65 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 1310-58-3	Toxic 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	UN1814
Proper Shipping Name	Potassium Hydroxide, Solution,
Hazard Class	8
Packing Group	II

IATA

UN/ID No	UN1814
Proper Shipping Name	Potassium Hydroxide, Solution,
Hazard Class	8
Packing Group	II

IMDG

UN/ID No	UN1814
Proper Shipping Name	Potassium Hydroxide, Solution,
Hazard Class	8
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
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 1310-58-3	1000 lb		RQ 1000 lb final RQ 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 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

Issue Date: 01-Jun-2010
Revision Date: 08-Apr-2015
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