



# Safety Data Sheet

*Bluegrass KESCO*

Water Treatment Products and Technical Services

**PRODUCT NAME: STABROM 909 Biocide**

**Revision Date: 29Apr2014**

Bluegrass KESCO encourages and expects customers to read and understand the entire Safety Data Sheet, as there is important information throughout the document. Follow the precautions identified in this document unless use conditions warrant other appropriate methods or actions.

## Section 1

### Identification

**Product Name: STABROM 909 Biocide**

#### Company Identification:

Bluegrass KESCO  
1101 Industrial Blvd.  
Louisville, KY 40219

#### 24-Hour Emergency Phone

Chemtrec  
(800) 424-9300

**Information Number:** (502) 969-4499

#### Product Recommended use:

Stabrom 909 Biocide is a liquid alkaline stabilized bromine based biocide for cooling water systems. We recommend that this product be used in a manner consistent with the listed use.

## Section 2

### Hazards Identification

#### Hazard Classification:

**Physical.....:** The product is not classified as a physical hazard.  
**Health.....:** Acute toxicity, Inhalation (Dusts/Mists) - Category 4  
Skin corrosion/irritation - Category 1  
Serious eye damage/eye irritation - Category 1  
**Environmental:** Acute and chronic aquatic toxicity - Category 2

#### Label Elements:

**Symbol.....:**



**Signal word.....:** Danger

**Hazard statement.....:**

- H332 - Harmful if inhaled.
- H314 - Causes severe skin burns and eye damage.
- H411 - Toxic to aquatic life with long lasting effects.

**Precautionary statements.....:**

- P101 - If medical advice is needed, have product container or label on hand.
- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 - Wash face, hands and any exposed skin thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.
- P280 - Use personal protective equipment as required.
- P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off all contaminated clothing immediately. Rinse skin with water/shower.
- P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate

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- medical attention.
- P308+ P313 - If exposed or concerned: Get medical advice/attention.
  - P310 - Immediately call a POISON CENTER or doctor/physician.
  - P312 - Call a POISON CENTER or doctor/physician if you feel unwell immediately call a POISON CENTER or doctor/physician.
  - P363 - Wash contaminated clothing before reuse.
  - P391 - Collect spillage.
  - P405 - Store locked up.
  - P501- Dispose of contents/container in accordance with local regulation.

### Section 3 Composition / Information on Ingredients

This product is a mixture, aqueous solution of:

Component Name	CAS #	Amount	Classification
Halogenated complex	*****	18 %	Acute toxicity, Inhalation (Category 4) Skin corrosion/irritation (Category 1) Serious eye damage/eye irritation (Category 1) Acute and chronic aquatic toxicity (Category 2)
Sodium Hydroxide	1310-73-2	< 20 %	Skin corrosion (Category 1) Serious eye damage (Category 1) Acute aquatic toxicity (Category 3)
Sulfamic acid	5329-14-6	< 20%	Acute toxicity, oral (Category 4) Skin irritation (Category 2) Eye irritation (Category 2A) Acute and chronic aquatic toxicity (Category 3)

Halogenated complex is claimed as trade secret in accordance with the provision of OSHA 29 CFR 1910.1200(i).

### Section 4 First Aid Measures

- Eye Contact.....:** If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- Skin Contact.....:** If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Inhalation.....:** Move victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of pocket mask equipment with a one-way valve or other proper respiratory medical device. Give CPR only if there is no pulse AND no breathing. Obtain medical attention IMMEDIATELY.
- Ingestion.....:** If swallowed,. Call a physician or Poison Control Center immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Probable mucosal damage may contraindicate the use of gastric lavage.
- General advice.:** Have the product container or label with you when calling a poison control center or doctor or going for treatment. Show this safety data sheet to the doctor in attendance.

#### SYMPTOMS OF EXPOSURE:

- Acute.....:**
- Eye Contact...:* Causes severe burns.
  - Skin Contact...:* Causes severe burns.
  - Ingestion.....:* Not expected to be acutely toxic.
  - Inhalation.....:* Not an expected route of exposure.

**Chronic.....:** Chronic hazards are not known.

#### NOTES TO PHYSICIAN:

**Treatment:** Treatment of exposures should be directed at the control of symptoms and the clinical condition. Probable mucosal damage may contraindicate the use of gastric lavage.

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## Fire-Fighting Measures

- Suitable extinguishing media.....:** This material does not burn. If exposed to fire from another source, use suitable extinguished agent for that fire.
- Unsuitable extinguishing media.....:** None known.
- Hazardous combustion products.....:** Thermal breakdown of this product during fire or very high heat conditions may generate the following decomposition products: Bromine. Chlorine.
- Special protective equipment/procedures:** In the event of fire and/or explosion do not breathe fumes.  
A self-contained respirator and protective clothing should be worn.  
Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

## Section 6

## Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Keep people away from and upwind of spill/leak. Provide adequate ventilation. Avoid contact with skin and eyes.
- Environmental precautions:** Contain any spill with dikes or absorbents to prevent migration and entry into sewers or streams. Large spills should be collected mechanically (remove by pumping) for disposal. May require excavation of contaminated soil. Take up small spills by first diluting with water and then using a dehalogenating agent such as sodium thiosulfate solution.
- Methods and materials for containment and cleaning up:** Prevent further leakage or spillage if safe to do so. Absorb with liquid-binding material (sand, diatomite, acid binders, and universal binders). Keep in suitable, closed containers for disposal.

## Section 7

## Handling and Storage

- Handling.....:** Avoid contact with skin, eyes and clothing.
- Storage.....:** Avoid freezing, excessive heat or exposure to light, especially direct sunlight. If heating is necessary to prevent freezing, care must be taken to prevent overheating. Precautions should be taken to ensure that the average product temperature is maintained below 43 °C. Temperature monitoring is recommended. At elevated temperatures, self-heating can lead to vigorous gas generation and over-pressurization of storage containers if appropriate controls are not in place. Avoid exposure of this product to incompatible materials/chemicals (see Stability and Reactivity section). Use of incompatible materials can promote the exothermic decomposition of the product. In extreme cases, this could result in vigorous gas formation and over-pressurization of the storage container. **STORAGE CONTAINER:** Vented and opaque containers: As the product ages, activity is gradually lost and pressure can build-up in the headspace (nitrogen); therefore, the product should be stored in vented containers. Product should also be stored in opaque containers to prevent exposure to light. To maximize product shelf life, store the product in an opaque container, in a cool, dry, well-ventilated area.
- Incompatible Materials:** This product is strongly basic and an oxidizing agent. Avoid contact with alcohols, aldehydes, strong reducing agents, strong oxidizers, acids, ammonia-containing products, and common metals such as steel, aluminum, iron and copper. Use of incompatible materials can promote the exothermic decomposition of the product.

## Section 8

## Exposure Controls / Personal Protection

### Control parameters:

<u>Component Name</u>	<u>CAS #</u>	<u>Exposure Limits</u>
Sodium Hydroxide	1310-73-2	2 mg/m3 (ceiling) - ACGIH 2 mg/m3 (PEL) - OSHA

The other components do not have assigned exposure limits.

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### Exposure controls:

**General Advice:** These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities. Keep away from food, drink and animal feeding stuffs. When using, do not eat, drink or smoke. Ensure that eyewash stations and safety showers are close to the workstation location.

<b>Personal Protection</b>	<b>Eye Protection.....:</b>	Wear chemical safety goggles or face shield with safety glasses. Have eye-wash stations available where eye contact can occur.
	<b>Skin Protection.....:</b>	Avoid skin contact. Wear protective gloves and replace at first signs of wear. Recommended protective glove materials include: neoprene, butyl-rubber, PVC, viton or saranex. Wear protective clothing if there is a possibility of exposure.
	<b>Respiratory Protection:</b>	None under normal conditions.
	<b>Ingestion.....:</b>	Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.
<b>Engineering Controls.....:</b>		General ventilation is recommended.

## Section 9 Physical and Chemical Properties

<b>Flashpoint.....:</b>	Not applicable (non-flammable)
<b>Boiling Point.....:</b>	223 °F
<b>Freezing Point.....:</b>	32 °F
<b>% Solubility in Water.....:</b>	100% soluble
<b>Appearance / Odor.....:</b>	Clear yellow to orange liquid with mild sweet odor
<b>Lower Flammability Limit:</b>	Not Flammable
<b>Upper Flammability Limit:</b>	Not Flammable
<b>Specific Gravity at 77° F...:</b>	1.29 to 1.37
<b>pH at 77° F .....</b>	12.4 to 14

## Section 10 Stability and Reactivity

<b>Reactivity.....:</b>	No data available.
<b>Chemical stability.....:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions...:</b>	No hazardous reaction expected under normal handling.
<b>Conditions to avoid.....:</b>	Protect from light. Extremes of temperature and direct sunlight. Keep away from heat. Freezing.
<b>Incompatible materials.....:</b>	This product is strongly basic and an oxidizing agent. Avoid contact with alcohols, aldehydes, strong reducing agents, strong oxidizers, acids, ammonia-containing products, and common metals such as steel, aluminum, iron and copper. Use of incompatible materials can promote the exothermic decomposition of the product.
<b>Hazardous decomposition products:</b>	Thermal breakdown of this product during fire or very high heat conditions may generate the following decomposition products: bromine, chlorine.

## Section 11 Toxicological Information

<b>Acute Toxicity.....:</b>	<b>Oral.....:</b> Species: Rat	<b>LD<sub>50</sub> = 2,491 mg/kg</b>
	<b>Dermal.....:</b> Species: Rat	<b>LD<sub>50</sub> &gt; 2,000 mg/kg</b>
	<b>Inhalation:</b> Species: Rat - 4 hours	<b>LC<sub>50</sub> &gt; 2.09 mg/l (aerosol)</b>
<b>Corrosivity/Irritation:</b>	<b>Skin.:</b> Corrosive to skin. Causes burns. <b>Eyes:</b> Corrosive. Risk of serious damage to eyes.	
<b>Sensitization.....:</b>	Not sensitizing .	

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Carcinogenicity.....:	None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).
Teratogenicity and Embryo toxicity	No information available.

### Section 12. Ecological Information

#### Ecotoxicological Effects:

##### Acute Fish Toxicity:

Species	Exposure	LC <sub>50</sub>
Bluegill sunfish	96 hrs	3.8 mg/l

##### Acute Invertebrate Toxicity:

Species	Exposure	EC <sub>50</sub>
Daphnia magna	48 hrs	4.8 mg/l

##### Acute Algae Toxicity:

Species	Exposure	EC <sub>50</sub>
Green algae	96 hrs	2.6 mg/l

Persistency and Degradation: No information available.

Bioaccumulative potential.....: No information available.

Mobility.....: No information available.

General comments.....: Toxic to aquatic life with long lasting effects.

### Section 13 Disposal Considerations

Waste Residue.....: Dispose in a safe manner in accordance with local/national regulations.

Product and packaging disposal: Contaminated packaging: Empty contaminated packaging thoroughly. Do not reuse container.

### Section 14 Transport Information

DOT Shipping Name: UN3266, Corrosive liquid, Basic, Inorganic, N.O.S.(Halogenated complex, sodium hydroxide)  
Class 8, PGIII

*Unless otherwise stated, the shipping information provided above applies only to non-bulk containers of this product. Proper shipping name and general shipping information may vary depending on packaging and mode of shipment. All products shipped from Bluegrass KESCO locations have been properly packaged and labeled according to appropriate hazardous materials shipping regulations. If any alteration of packaging, product, or mode of transportation is further intended, different shipping information (including but not limited to proper shipping name, RQ designation, and labeling) may apply. For further information pertaining to the shipping requirements for this product, contact Bluegrass KESCO.*

### Section 15 Regulatory Information

The following regulations are known to apply to the use and disposal of this product. Additional Federal, State and Local regulations may also be applicable.

#### SARA (Superfund Amendments and Reauthorization Act):

SARA 302 Extremely Hazardous Substances List....: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 312 Hazard Category.....: Immediate (Acute) Health Hazard.

SARA 313 Toxic Chemicals List.....: The following components are listed on the SARA 313 Toxic Substances List (may be listed as categories): None

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act): The following components are listed on the CERCLA Hazardous Substances List (may be listed as categories): Sodium Hydroxide  
RQ = 1,000 lbs.



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**RCRA (Resource Conservation and Recovery Act) Listed Hazardous Waste:**

No components of this product are listed.

**CWA (Clean Water Act) Listed Substances.....:**

No components of this product are listed.

**FDA (Food and Drug Administration).....:**

This product is **not approved** for food contact uses.

**TSCA (Toxic Substances Control Act) Applicability.....:**

All components are listed on TSCA Inventory.

**FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act).....:**

EPA Registration Number: 3377-55

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements could differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**DANGER**

Corrosive

Causes irreversible eye damage and skin burns.

Harmful if swallowed, or absorbed through the skin.

Strongly basic and an oxidizing agent.

This product is toxic to fish and aquatic organisms.

### STATE REGULATIONS:

**Various State Right to Know Acts:** Non-proprietary hazardous chemicals are listed in Section 3 of this Safety Data Sheet. Should you require further information on specific proprietary chemicals or inert ingredients please contact Bluegrass KESCO.

## Section 16

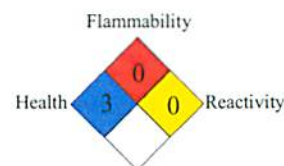
## Other Information

**National Fire Protection Association (NFPA) Ratings:** This information is intended solely for the use of individuals trained in the NFPA system.

**HMIS/NPCA Ratings.:** Health 3; Flammability 0; Reactivity 0

**NFPA Ratings.....:** Health 3; Flammability 0; Reactivity 0

**0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme**



**Issue Date.....:** 29Apr2015

**Version Number.:** 0

The information on this Safety Data Sheet reflects the latest information and data that we have on hazards, properties, and handling of this product under the recommended conditions of use. Any use of this product or method of application which is not described in the Product Data Sheet is the responsibility of the user. This Safety Data Sheet was prepared to comply with the last version of the OSHA Hazard Communication regulations.

Bluegrass KESCO warrants that this product conforms to chemical description and is the reasonably fit for the purpose referred to in the directions for use when used in accordance with the directions under normal conditions.

Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE. No such warranties shall be implied by law or no agent of seller is authorized to alter this warranty in any except in writing with specific reference to this warranty.

The exclusive remedy against seller shall be a claim for damages not to exceed the purchase price of this product, without regard to whether such a claim is based upon breach of warranty or tort.

Any controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by arbitration in accordance with the commercial arbitration rules of the American Arbitration Association, and judgment upon the award rendered by the Arbitration(s) may be entered in any court having jurisdiction thereof.