SAFETY DATA SHEET

8-WAY™
Water treatment for both steam and hot water systems

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name
8-Way™

Product Codes
68712, 68714, 68716

Chemical Family
Inorganic base

Use
Boiler water treatment

Manufacturer’s Name
The RectorSeal Corporation
2601 Spenwick Drive
Houston, Texas 77055 USA

Date of Validation
November 21, 2017

Date of Preparation
November 21, 2017

HMIS Codes
Health 3
Flammability 0
Reactivity 1
PPI B

Emergency Telephone No.
Chemtrec 24 Hours
(800)-424-9300 USA
(703)-527-3887 International

Technical Service Telephone No.
(800)-231-3345 or (713)-263-8001

SECTION 2 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

OSHA Hazards
Corrosive

GHS CLASSIFICATION
Skin corrosion (Category 1A)
Serious eye damage (Category 1)
Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements

GHS05: Corrosive
Signal Word: Danger
Hazard statement(s)
  H314 - Causes severe skin burns and eye damage.
  H402 - Harmful to aquatic life.

Precautionary statement(s)
  P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
  P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P310 - Immediately call a POISON CENTER or doctor/ physician.

Summary Of Acute Hazards
  Exposure to human tissue will result in irritation and chemical burns.

Route Of Exposure, Signs And Symptoms

INHALATION
  Extremely corrosive to respiratory system.

EYE CONTACT
  Corrosive, contact causes severe eye burns.

SKIN CONTACT
  Corrosive to skin.

INGESTION
  Poison! Swallowing large quantities can cause death and burns to digestive system.

SUMMARY OF CHRONIC HAZARDS
  Exposure to human tissue will result in irritation and chemical burns.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
  Individuals with pre-existing or chronic diseases of the eyes, skin or persons with chemical sensitivity may have increased susceptibility to excessive exposures.

Section 3 – Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage By Weight</th>
<th>CAS Number</th>
<th>EC#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Phosphate</td>
<td>4.87</td>
<td>68915-31-1</td>
<td>272-808-3</td>
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<tr>
<td>Sodium Hydroxide</td>
<td>15</td>
<td>1310-73-2</td>
<td>215-185-5</td>
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<tr>
<td>Sodium Nitrite</td>
<td>6.78</td>
<td>7632-00-0</td>
<td>231-555-9</td>
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</tbody>
</table>
**SECTION 4 – FIRST AID MEASURES**

If inhaled: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

If on skin: Flush with large amounts of water. If irritation or burns occur, seek immediate medical attention.

If in eyes: Flush with large amounts of water for at least 15 minutes. Get medical attention if irritation persists.

If swallowed: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

**SECTION 5 – FIRE FIGHTING MEASURES**

**Extinguishing Media**
Use agents suitable for surrounding fires.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus (SCBA) and other protective clothing. Hazardous decomposition products possible (see Section 10). Dike area as run-off may create additional environmental contamination.

**Unusual Fire And Explosion Hazards:** Decomposition forms toxic fumes of sodium oxide. Flammable gas may be produced on contact with metals.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

**Steps To Be Taken In Case Material Is Released Or Spilled:** Keep people away. Wear chemical protective clothing. Stop discharge if possible. Isolate and remove discharged material. Flush and clean area with water.

**SECTION 7 – HANDLING AND STORAGE**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and upright when not in use. Store only in polyethylene or glass containers. DO NOT USE METAL CONTAINERS.

**Other Precautions:** Do not permit workers to handle without proper training or proper protective equipment. Store in well-sealed containers, which are protected from physical damage. Empty containers may contain residues; treat as if full and observe all product precautions. Do not reuse container.

KEEP OUT OF REACH OF CHILDREN.
SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient | Units
--- | ---
Sodium Phosphate | 
ACGIH TLV: | N/D
OSHA PEL: | N/D
Sodium Hydroxide | 
ACGIH TLV: | CL 2 mg/m³
OSHA PEL: | CL 2 mg/m³
Sodium Nitrite | 
ACGIH TLV: | N/D
OSHA PEL: | N/D

Respiratory Protection (Specify Type): In confined, poorly ventilated areas, use NIOSH/MSHA approved self-contained breathing apparatus. None required for normal use in adequately ventilated areas where TLV is not exceeded.

Ventilation – Local Exhaust: Acceptable.

Special: Explosion-proof.

Mechanical (General): Preferable.

Other: N/A

Protective Gloves: Rubber or neoprene.

Eye Protection: Chemical splash goggles (ANSI Z-87.1 or equivalent)

Other Protective Clothing Or Equipment: Coveralls recommended.

Work/Hygienic Practices: Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling point: > 212°F (> 100°C) @ 760 mm Hg
Specific gravity (H2O = 1): 1.09
Vapor pressure (mmHg): 1 @ 77°F (20°C)
Melting point: N/A
Vapor Density (Air = 1): > 1
Evaporation rate (Ethyl Acetate = 1): < 1
Appearance/Odor: Dark blue or purple/Slight odor
Solubility in water: Soluble

Volatile Organic Compounds (VOC) Content (theoretical percentage by weight): 0% or (0 g/L)
Flash point: None
Lower explosion limit: N/D
Upper explosion limit: N/D
SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: Heat, sparks, open flames.

Incompatibility (Materials To Avoid): Acids, flammable liquids, organics, halogens, metals, nitromethane. When wet, attacks chemically active metals such as aluminum, tin, lead, and zinc to produce flammable hydrogen gas.

Hazardous Decomposition Products: Decomposition forms toxic fumes of sodium oxide.

Hazardous Polymerization: Will not occur.

SECTION 11 – TOXICOLOGY INFORMATION

Chronic Health Hazards

No ingredient in this product is an IARC, NTP or OSHA Lister carcinogen.

Toxicology Data

Ingredient Name

**Sodium Phosphate**

Oral-Rabbit, adult LD50: 3053 mg/kg

Inhalation-Rat LC50: N/D

**Sodium Hydroxide**

Oral-Rabbit, adult LDLo: 500 mg/kg

Inhalation-Rat LC50: N/D

**Sodium Nitrite**

Oral-Rabbit, adult LD50: 85 mg/kg

Inhalation-Rat LC50: 5500 mg/m3

SECTION 12 – ECOLOGICAL INFORMATION

Ecological Data

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<tr>
<th>Ingredient Name:</th>
<th>Sodium Phosphate</th>
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<tbody>
<tr>
<td>Food Chain Concentration Potential:</td>
<td>N/D</td>
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<tr>
<td>Waterfowl Toxicity:</td>
<td>N/D</td>
</tr>
<tr>
<td>BOD:</td>
<td>N/D</td>
</tr>
<tr>
<td>Aquatic Toxicity:</td>
<td>N/D</td>
</tr>
</tbody>
</table>
Ecological Data (cont.)

Ingredient Name: Sodium Hydroxide
Food Chain Concentration Potential: None
Waterfowl Toxicity: N/D
BOD: None
Aquatic Toxicity: 125 ppm/96 hr/mosquito fish/TLm

Ingredient Name: Sodium Nitrite
Food Chain Concentration Potential: None
Waterfowl Toxicity: N/A
BOD: N/A
Aquatic Toxicity: 17.1 ppm/24 hr/minnow

Section 13 – Disposal Considerations

Waste Classification: Corrosive (D002)
Disposal Method: Neutralization
RCRA classified hazardous waste. Dispose of absorbed materials and liquid waste in accordance with all local, state and federal regulations.

Section 14 – Transportation Information

DOT: UN3266, Corrosive liquid, basic, inorganic, n.o.s. (sodium hydroxide & sodium nitrite), Class 8, PG III, ERG#154
Gallons and less: Limited Quantity or (LTD-QTY)

Ocean (IMDG): Gallons and less: UN3266, Corrosive liquid, basic, inorganic, n.o.s. sodium hydroxide & sodium nitrite), Class 8, PG III, Limited Quantity or (LTD-QTY) EMS-No: F-A, S-B

Air (IATA): UN3266, Corrosive liquid, basic, inorganic, n.o.s. (sodium hydroxide & sodium nitrite), Class 8, PG III, ERG#154

Section 15 – Regulatory Information

Regulatory Data

Ingredient Name: Sodium Phosphate
SARA 313 No
TSCA Inventory Yes
CERCLA RQ N/A
RCRA Code N/A
### Regulatory Data (cont.)

<table>
<thead>
<tr>
<th>Ingredient Name:</th>
<th>Sodium Hydroxide</th>
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<td>SARA 313:</td>
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<tr>
<td>TSCA Inventory</td>
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<tr>
<td>CERCLA RQ</td>
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<td>RCRA Code</td>
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<thead>
<tr>
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<td>Yes</td>
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<td>100 lb.</td>
</tr>
<tr>
<td>RCRA Code</td>
<td>N/A</td>
</tr>
</tbody>
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**Section 16 – Other Information**

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made.

Consult RectorSeal for further information: (713) 263-8001