



A CSW Industrials Company

SAFETY DATA SHEET

**8-WAY™**  
Boiler water treatment

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

RectorSeal LLC  
2601 Spenwick Drive  
Houston, Texas 77055 USA

Date of validation

October 23, 2019

Date of Preparation

October 23, 2019

HMIS Codes

Health 3  
Flammability 0  
Reactivity 1  
PPI D

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 Physical Hazards

Corrosive

**GHS CLASSIFICATION**

Acute toxicity, Oral,(Category 5)

Carcinogenicity, (Category 1B),

Acute aquatic toxicity, (Category 1)

Skin Corrosion/irritation, (Category 1A)

Serious Eye Damage/Eye Irritation, (Category 1)

Specific target organ toxicity (single exposure) (Category 3)

Target Organs - Respiratory system.

## GHS Label elements, including precautionary statements



Signal Word: Danger  
GHS05: Corrosive  
GHS07: Exclamation Mark  
GHS08: Health hazard  
GHS09: Environmental hazard

### Hazard Statements:

H290 - May be corrosive to metals.  
H303 - May be harmful if swallowed.  
H314 - Causes severe skin burns and eye damage.  
H318 - Causes serious eye damage.  
H350 - May cause cancer.  
H355 - May cause respiratory irritation.  
H400 - Very toxic to aquatic life.

### Precautionary Statements:

Prevention  
P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P234 - Keep only in original container  
P260 - Do not breathe 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 - Wear protective gloves/ protective clothing/ eye protection/ face protection.

### Response

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.  
P305 + P351 + P338 + P310 - 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/doctor.  
P308 + P313 - IF exposed or concerned: Get medical advice/attention.  
P363 - Wash contaminated clothing before reuse.  
P390 - Absorb spillage to prevent material damage.

### Storage

P405 - Store locked up.  
P406 - Store in corrosive resistant stainless steel container with a resistant inner liner.

### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant.

## 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

**Ingredient:** Sodium Phosphate

Percentage by weight: 4.87

CAS#: 68915-31-1

EC#: 272-808-3

**Ingredient:** Sodium Hydroxide

Percentage by weight: 15

CAS#: 1310-73-2

EC#: 215-185-5

**Ingredient:** Sodium Nitrite

Percentage by weight: 6.78

CAS#: 7632-00-0

EC#: 231-555-9

**Ingredient:** Water

Percentage by weight: 73.35

CAS#: 7732-18-5

EC#: 5231-791-2

## 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:

Seep 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      |
|-------------------------|------------|
| <b>Sodium Phosphate</b> |            |
| ACGIH TLV               | N/D        |
| OSHA PEL                | N/D        |
| <b>Sodium Hydroxide</b> |            |
| ACGIH TLV               | CL 2 mg/m3 |
| OSHA PEL                | CL 2 mg/m3 |
| <b>Sodium Nitrite</b>   |            |
| ACGIH TLV               | N/D        |
| OSHA PEL                | N/D        |

### 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) @ 760mm Hg       |
| Specific Gravity (H <sub>2</sub> O = 1):    | 1.09                             |
| pH:   | 10-12                            |
| Vapor Pressure (mm Hg):                     | 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                          |
| Flash Point:                                | None                             |
| Lower Explosion Limit:                      | N/D                              |
| Upper Explosion Limit:                      | N/D                              |
| VOLATILE ORGANIC COMPOUNDS (VOC)            |                                  |
| Content (Theoretical Percentage By Weight): | 0% or (0 g/L)                    |

## 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 listed carcinogen.

IARC: 2A-Group 2A: Probably carcinogenic to humans(Sodium nitrite)

GHS Carcinogenicity Approximate Equivalence = Category 1B

**Toxicology Data****Ingredient Name****Sodium Phosphate**

Oral-Rat 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

Toxicity to fishflow-through testLC50-Oncorhynchus mykiss (rainbow trout)-0.94 -1.92 mg/l-96.0 h(Sodium nitrite)mortality NOEC-Oncorhynchus mykiss (rainbow trout)-0.54 mg/l-96.0 h(Sodium nitrite) Toxicity to daphnia and other aquatic invertebratesEC50-Daphnia magna (Water flea)-12.5 mg/l-48 h(Sodium nitrite) Toxicity to algaeNOEC-Desmodesmus subspicatus (green algae)-100 mg/l-72 h(Sodium nitrite)

## SECTION 12 - ECOLOGICAL INFORMATION

**Ecological Data****Ingredient Name****Sodium Phosphate**

Food Chain Concentration Potential N/D

WATERFOWL TOXICITY N/D

BOD N/D

AQUATIC TOXICITY N/D

**Sodium Hydroxide**

Food Chain Concentration Potential None

WATERFOWL TOXICITY N/D

BOD None

AQUATIC TOXICITY 125 ppm/96 hr/mosquito fish/TLm

**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 II, 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 II, 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 II, 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 |

##### Sodium Hydroxide

|                |          |
|----------------|----------|
| SARA 313       | No       |
| TSCA Inventory | Yes      |
| CERCLA RQ      | 1000 lb. |
| RCRA Code      | N/A      |

##### Sodium Nitrite

|                |         |
|----------------|---------|
| SARA 313       | Yes     |
| TSCA Inventory | Yes     |
| CERCLA RQ      | 100 lb. |
| RCRA Code      | N/A     |

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