SDS # Z0454

## SAFETY DATA SHEET

SDS 0262

\_\_\_\_\_\_ Section 1 -- PRODUCT AND COMPANY IDENTIFICATION \_\_\_\_\_\_ HMIS CODES PRODUCT NAME Health Flammability 8-Way Ω Reactivity 1 D PRODUCT CODES PPT 68712, 68714, 68716 CHEMICAL FAMILY Inorganic Base USE Boiler Water Treatment MANUFACTURER'S NAME EMERGENCY TELEPHONE NO. The RectorSeal Corporation Chemtrec 24 Hours 2601 Spenwick Drive (800)424-9300 USA Houston, Texas 77055 USA (703)527-3887 International DATE OF VALIDATION TECHNICAL SERVICE TELEPHONE NO. January 23, 2015 (800)231-3345 or (713)263-8001 DATE OF PREPARATION October 10, 2012 \_\_\_\_\_\_ 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 Pictogram: 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. 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

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Exposure to human tissue will result in irritation and chemical burns.

Individuals with pre-existing or chronic diseases of the eyes, skin

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

or persons with chemical sensitivity may have increased susceptibility to excessive exposures.

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Section 3 -- COMPOSITION/INFORMATION ON INGREDIENTS

\_\_\_\_\_\_

INGREDIENT: Sodium Phosphate PERCENTAGE BY WEIGHT: 4.87 CAS NUMBER: 68915-31-1 EC# : 272-808-3

\_\_\_\_\_

INGREDIENT: Sodium Hydroxide PERCENTAGE BY WEIGHT: 15 CAS NUMBER: 1310-73-2 EC# : 215-185-5

\_\_\_\_\_\_

INGREDIENT: Sodium Nitrite PERCENTAGE BY WEIGHT: 6.78 CAS NUMBER: 1312-76-1

EC# : 215-199-1

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Section 4 -- FIRST AID MEASURES

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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.

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Section 5 -- FIRE FIGHTING MEASURES

\_\_\_\_\_\_

## EXTINGUSING 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

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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.

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Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

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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) @ 760mm Hg
SPECIFIC GRAVITY (H20 = 1):
                              1.09
VAPOR PRESSURE (mm Hg):
                              1 @ 77 F (20 C)
MELTING POINT:
                              N/A
VAPOR DENSITY (AIR = 1):
                              >1
EVAPORATION RATE (ETHYL ACETATE = 1): <1
                              Dark Blue or Purple/ Slight Odor
APPEARANCE/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.
TOXICOLOGY DATA
Ingredient Name
______
  Sodium Phosphate
              Oral-Rabbit, adult LD50: 3053 mg/kg
              Inhalation-Rat LC50: N/D
  Sodium Hydroxide
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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
Ingredient Name
  Sodium Phosphate
             Food Chain Concentration Potential
             WATERFOWL TOXICITY
                                           N/D
             AQUATIC TOXICITY
                                           N/D
  Sodium Hydroxide
             Food Chain Concentration Potential
                                           None
             WATERFOWL TOXICITY
                                           N/D
             BOD
                                           None
             AOUATIC TOXICITY
                                125 ppm/96 hr/mosquito fish/TLm
  Sodium Nitrite
             Food Chain Concentration Potential
                                           None
             WATERFOWL TOXICITY
                                           N/A
             ROD
                                           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: Consumer Commodity, ORM-D
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
  Sodium Hydroxide
             SARA 313
                         No
             TSCA Inventory Yes
             CERCLA RQ
RCRA Code
                         1000 lb.
                         N/A
  Sodium Nitrite
             SARA 313
                          Yes
             TSCA Inventory
                         Yes
             CERCLA RQ
                          100 lb.
             RCRA Code
                          N/A
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Section 16 -- OTHER INFORMATION

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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

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Section 1 PRODUCT AND COMPANY IDENTIFICATION		
PRODUCT NAME 8-Way PRODUCT CODES 68712, 68714, 6 CHEMI CAL FAMI LY I norgani c Base USE		HMIS CODES  Health 3  Flammability 0  Reactivity 1  PPI D
Boiler Water Treatment MANUFACTURER'S NAME The RectorSeal Corporation 2601 Spenwick Drive Houston, Texas 77055 USA VALIDATION DATE February 21, 2006 REVISION DATE February 21, 2006		
% by WT CAS 4.87 68915-	No. INGREDIENT 31-1 Sodium Phosphate ACGIH TLV N OSHA PEL N	UNI TS I/D I/D
3. 21 1310-	73-2 Sodium Hydroxide ACGIH TLV CL	_ 2 mg/m3 _ 2 mg/m3
		I/D
Section 3 HAZARDS IDENTIFICATION		
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.		
	4 FIRST AID MEASURES	
If INHALED:	immediately. Give oxyger	remove victim to fresh air n or artificial respiration as / medical attention. Prompt action
If on SKIN:		of water. If irritation or burns lical attention.
If in EYES: If SWALLOWED:	Flush with large amounts Get medical attention if If swallowed, call a phys vomiting at the instructi anything by mouth to an u	of water for at least 15 minutes. irritation persists. sician immediately. Only induce on of a physician. Never give unconscious person.
Section 5 FIRE FIGHTING MEASURES		
FLASH POINT None	LEL N/A	UEL N/A
Use agents suitable for surrounding fires.		

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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
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.
      Launder contaminated clothing before reuse.
                    Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES
BOILING POINT:
SPECIFIC GRAVITY (H2O = 1):
VAPOR PRESSURE (mm Hg):
                                                                       >212 F (>100 C) @ 760mm Hg
                                                                       1.09
                                                                       1 @ 77 F (20 C)
WELTING POINT:
VAPOR DENSITY (AIR = 1):
EVAPORATION RATE (ETHYL ACETATE = 1):
APPEARANCE/ODOR:
                                                                       N/A
                                                                       >1
                                                                       Dark Blue or Purple/ Slight Odor
 SOLUBILITY IN WATER:
 VOLATILE ORGANIC COMPOUNDS(VOC)Content
                                                                   0% or (0 g/L)
 (Theoretical Percentage By Weight):
 ___________
                   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
 oxi de.
 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.
 TOXI COLOGY DATA
 Ingredient Name
      Sodium Phosphate
                                 Oral-Rabbit, adult LD50: 3053 mg/kg
Inhalation-Rat LC50: N/D
      Sodi um Hydroxi de
                                 Oral-Rabbit, adult LDLo: 500 mg/kg
Inhalation-Rat LC50: N/D
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    Sodium Nitrite
                      Oral-Rabbit, adult LD50: 85 mg/kg
Inhalation-Rat LC50: 5500 mg/m3
             Section 12 -- Ecological Information
ECOLOGI CAL DATA
Ingredient Name
    Sodium Phosphate
                       Food Chain Concentration Potential WATERFOWL TOXICITY
                       AQUATIC TOXICITY
    Sodi um Hydroxi de
                       Food Chain Concentration Potential WATERFOWL TOXICITY
                                                                         None
                                                                         N/D
                                                                         None
                       AQUATIC TOXICITY
                                                      125 ppm/96 hr/mosquito fish/TLm
    Sodium Nitrite
                       Food Chain Concentration Potential WATERFOWL TOXICITY
                                                                         None
                                                                         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: Corrosive liquid, basic, inorganic, n.o.s. (sodium hydroxide & sodium nitrite), Class 8, UN3266, PGIII, ERG154

OCEAN (IMDG): Corrosive liquid, basic, inorganic, n.o.s. (sodium hydroxide & sodium nitrite), Class 8, UN3266, PGIII, IMDG#8147-1 EmS#8-15, MFAG#760

AIR (IATA): Corrosive liquid, basic, inorganic, n.o.s. (sodium hydroxide & sodium nitrite), Class 8, UN3266, PGIII

WHMIS (CANADA): Class E
______
              Section 15 -- REGULATORY INFORMATION
REGULATORY DATA
Ingredient Name
    Sodium Phosphate
                       SARA 313
                       TSCA Inventory
                                             Yes
                       CERCLA RQ
                                             N/A
                       RCRA Code
                                             N/A
    Sodi um Hydroxi de
                       SARA 313
                                             No
                       TSCA Inventory
                                              Yes
                       CERCLA RQ
                                             1000 lb.
                       RCRA Code
                                             N/A
    Sodium Nitrite
                       SARA 313
                       TSCA Inventory
                                             Yes
```

N/A \_\_\_\_\_\_

100 lb.

Section 16 -- OTHER INFORMATION

CERCLA RQ

RCRA Code

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