

## SECTION 1: IDENTIFICATION

### 1.1 Product Identifier

Product Name: Steel Brite  
Synonyms: Steel Brite I, SB1  
Product Form: Liquid, mixture  
Chemical Family: Polymeric acid solution.

### 1.2 Intended Use of the Product

Use of the substance: Buffered acid solution with surfactants used to clean steel and concrete, targeting biofouling and iron staining; used at a rate of 0.4 to 1% by surface area.

Use of the substance: For professional use only

### 1.3 Contact Information of the Manufacturer

Johnson Screens / Bilfinger Water Technologies  
1950 Old Highway 8 NW  
New Brighton, MN 55112  
USA  
Telephone: +1-661-323-1525  
<http://www.water.bilfinger.com/>

### 1.4 Emergency Telephone Number

Emergency Number: +1-800-262-8200 USA  
+1-703-741-5500 International  
CHEMTREC

## SECTION 2: HAZARDOUS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### Classification (GHS-US)

Met. Corr. 1 H290  
Skin Corr. 1A H314  
Eye Dam. 1 H318

Full text of H-phrases: see Section 16

### 2.2. Label Elements

GHS-US Labelling

Hazard Pictograms (GHS-US):



Signal Word (GHS-US):

Warning

Hazard Statements:

H315 - Causes skin irritation.

(GHS-US)

H319 - Causes serious eye irritation.

Precautionary Statements:

P234 - Keep in original container.

(GHS-US)

P260 - Do not breathe vapors, mist, or spray.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear eye protection, face protection, protective clothing, protective gloves.

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 - If inhaled: Remove person 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.

P310 - Immediately call a POISON CONTROL CENTER, or a doctor.

P321 - Specific treatment (see Section 4 on this SDS).

P363 - Wash contaminated clothing before reuse.

P390 - Absorb spillage to prevent material damage.

P406 - Store in corrosive resistant container.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

### 2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. If involved in a fire and thermal decomposition occurs, potential toxic and acrid vapors may be released.

### 2.4 Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substance: Not Applicable

### 3.2 Mixture

Name	Product Identifier	Percentage	Classification (GHS-US)
Phosphoric acid	CAS No. 7664-38-2	Proprietary	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Organic acid blend	CAS No. 26099-09-2	Proprietary	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation: mist), H332 Skin Corr. 1B, H315 Eye Dam. 1, H319
Proprietary dispersant polymer	Proprietary	Proprietary	Not classified
Proprietary surfactant mixture	Proprietary	Proprietary	Not classified
Water	CAS No. 7732-18-5	Proprietary	Not classified

Note: If Chemical Name/CAS No. is "proprietary" and/or weight percentage is not listed, the specific chemical identity and/or percentage of composition has been withheld as a trade secret in accordance with 29 CFR §1910.1200. See Section 16 for the full text of H-phrases.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**First-aid Measures after Inhalation:** Keep at rest and in a position comfortable for breathing. Seek medical attention. Symptoms may be delayed.

**First-aid Measures after Skin Contact:** Remove/Take off immediately all contaminated clothing. Immediately flush skin with plenty of water and mild soap for at least 30 minutes. Seek medical advice/attention. Wash contaminated clothing before reuse.

**First-aid Measures after Eye Contact:** Immediately rinse with water for a prolonged period while holding the eyelids wide open. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 30 minutes. Immediately call a POISON CENTER or doctor/physician.

**First-aid Measures after Ingestion:** Rinse mouth thoroughly with water. Do NOT induce vomiting. Seek medical attention immediately.

### 4.2 Most Important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Causes mild skin irritation and possible severe eye irritation.

**Symptoms/Injuries after Inhalation:** Inhalation may cause immediate severe irritation progressing quickly to chemical burns. Corrosive to mucus membranes. Corrosive to the respiratory tract. Symptoms may be delayed.

**Symptoms/Injuries after Skin Contact:** Causes severe skin irritation.

**Symptoms/Injuries after Eye Contact:** Causes serious eye irritation.

**Symptoms/Injuries after Ingestion:** May cause irritation of the linings of the mouth, throat, and gastrointestinal tract. Ingestion of a large quantity of this material could result in serious health hazard.

**Chronic Symptoms:** None expected under normal conditions of use.

#### 4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread product.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Reacts with (strong) oxidizers: (increased) risk of fire. Contact with metals may evolve flammable hydrogen gas.

### 5.3. Advice for Firefighters Precautionary Measures **Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

**Firefighting Instructions:** Keep upwind. Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid enter sewers or waterways.

**Other Information:** Do not allow the product to be released into the environment. Do not allow run-off from fire fighting to enter drains or water sources.

## SECTION 6: Accidental Release Measures

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all unnecessary exposure. Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist, or spray.

#### 6.1.1 For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel. Keep upwind.

#### 6.1.2 For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### 6.2 Environmental Precautions

Avoid unnecessary release into the environment. Notify authorities if undiluted product enters sewers or public waters.

### 6.3 Methods and Material for Containment and Cleaning Up **For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Ventilate area. Clean up spills immediately and dispose of waste safely. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Collect absorbed material and place into a sealed, labeled container for proper disposal. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

### 6.4 Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see Section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for Safe Handling

**Additional Hazards When Processed:** Any proposed use of this product in an elevated temperature process should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in areas where product is used.

**Storage Conditions:** Store in a dry, cool, and well-ventilated area. Keep container closed when not in use. Store away from oxidizers and caustic products. Storage areas should be periodically checked for damage and integrity.

**Incompatible Products:** Strong oxidizers. Strong bases.

### 7.2 Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Observe all regulations and local requirements regarding storage of containers. Container remains hazardous when empty, unless properly cleaned. Continue to observe all precautions. Containers and equipment used to handle this product should be exclusively for this material.

### 7.3 Specific End Use(s)

Buffered acid solution with surfactants used to clean steel and concrete, targeting biofouling and iron staining; used at a rate of 0.4 to 1% by surface area.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control Parameters

For substances listed in Section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Phosphoric acid (7664-38-2)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
USA ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	1000 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>

### 8.2 Exposure Controls

#### Appropriate Engineering Controls:

Emergency eye wash fountain should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilations, especially in confined areas. Ensure all national/local regulations are observed.

#### Personal Protective Equipment:

Face shield. Protective goggles. Protective clothing. Gloves.  
Insufficient ventilation: wear respiratory protection.



<b>Materials for Protective Clothing:</b>	Chemically resistant materials and fabrics.
<b>Hand Protection:</b>	Impermeable protective gloves.
<b>Eye Protection:</b>	A full face shield is recommended. Chemical safety goggles.
<b>Skin and Body Protection:</b>	Wear suitable protective clothing.
<b>Respiratory Protection:</b>	Use a NIOSH approved respirator or self-contained-breathing-apparatus whenever exposure may exceed established Occupational Exposure Limits.
<b>Environmental Exposure Controls:</b>	Do not allow the product to be released into the environment.
<b>Consumer Exposure Controls:</b>	Do not eat, drink, or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical and Chemical Properties

Physical State:	Liquid	Odor:	Slight chemical odor
Appearance:	Clear, yellow	Auto Ignition Temp:	Non-detect (none)
pH:	2.4	Specific Gravity:	1.15
Boiling point:	118 °C (244.4°F)	Freezing point:	0 °C (32 °F) – clouding will occur
Vapor Density:	1.0 (water)	Vapor pressure:	Vapor is water
Solubility:	Water (complete)		

9.2 **Other Information:** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:** Reacts with (strong) oxidizers: increased risk of fire. Contact with metals may evolve release of flammable hydrogen gas.

**10.2 Chemical Stability:** Stable under recommended handling and storage conditions (see Section 7).

**10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**10.4 Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, open flames, sources of ignition and incompatible materials.

**10.5 Incompatible Materials:** Strong oxidizers. Strong bases. Light metals and their alloys. Galvanized surfaces.

**10.6 Hazardous Decomposition Products:** Acrid smoke and irritating fumes. Hydrogen. Corrosive vapors.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxicological Effects

**Acute Toxicity:** Not Classified.

Phosphoric acid (7664-38-2)	
LD50 Oral Rat	1530 mg/kg
LD50 Dermal Rabbit	2740 mg/kg
LC50 Inhalation Rat	>850 mg/m <sup>3</sup> (exposure time: 1 hour)

**Skin Corrosion/Irritation:** Causes mild skin irritation and possible severe eye irritation; pH: 2.4.

**Serious Eye Damage/Irritation:** May cause serious eye irritation or damage. pH: 2.4.

**Respiratory or Skin Sensitization:** Not Classified.

**Germ Cell Mutagenicity:** Not Classified.

**Carcinogenicity:** Not Classified.

**Reproductive Toxicity:** Not Classified.

**Specific Target Organ Toxicity (single exposure):** Not Classified.

**Specific Target Organ Toxicity (repeated exposure):** Not Classified.

**Aspiration Hazard:** Not Classified.

**Symptoms/Injuries after Inhalation:** Inhalation of mist may cause immediate severe irritation progressing quickly to chemical burns. Corrosive to respiratory tract. Symptoms may be delayed.

**Symptoms/Injuries after Skin Contact:** Causes mild skin irritation.

**Symptoms/Injuries after Eye Contact:** May cause serious eye irritation or damage.

**Symptoms/Injuries after Ingestion:** May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Swallowing a large quantity of this material will result in a serious health hazard.

**Chronic Symptoms:** None expected under normal conditions of use.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

**Ecology – General:** This material is hazardous to the aquatic environment in large quantities. Keep out of sewers and waterways unless neutralized and/or diluted.

**Ecology – Water:** This material is hazardous to the aquatic environment in large quantities. Keep out of sewers and waterways unless neutralized and/or diluted.

**LC50 Fish 1:** > 5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])

**EC50 Daphnia 1:** 44 mg/l

**12.2 Persistence and Degradability:** No additional information available

**12.3 Bioaccumulation Potential:** Non-bioaccumulating

**12.4 Mobility in Soil:** Product is slightly viscous and has limited mobility in soils.

**12.5 Other Adverse Effects:** No additional information available

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste Treatment Methods

**Sewage Disposal Recommendations:** Diluted product will not disrupt waste water treatment. Do not empty into drains; dispose of this material and its container in a safe way.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

## SECTION 14: TRANSPORTATION INFORMATION

### 14.1 In Accordance with DOT

Not regulated as a hazardous material by the US Dept. of Transportation (DOT) 49CFR 172.101 Hazardous Materials Table

**Proper Shipping Name:** COMPOUND, LIQUID, CLEANING, CORROSIVE, PHOSPHORIC ACID SOLUTION

**Hazard Class:** 8

**Identification Number:** UN/NA1805

**Label Codes:** 8

**Packing Group:** III

### 14.2 In Accordance with IMDG

**Proper Shipping Name:** COMPOUND, LIQUID, CLEANING, CORROSIVE, PHOSPHORIC ACID SOLUTION

**Hazard Class:** 8

**Identification Number:** UN/NA1805

**Packing Group:** III

**Label Codes:** 8

**EmS-No. (Fire):** F-A

**EmS-No. (Spillage):** S-B

**14.3 In Accordance with IATA****Proper Shipping Name:** COMPOUND, LIQUID, CLEANING, CORROSIVE, PHOSPHORIC ACID SOLUTION**Packing Group:** III**Identification Number:** UN/NA1805**Hazard Class:** 8**Label Codes:** 8**ERG Code (IATA):** 8L**14.4 In Accordance Canadian TDG****Proper Shipping Name:** COMPOUND, LIQUID, CLEANING, CORROSIVE, PHOSPHORIC ACID SOLUTION**Hazard Class:** 8**Label Codes:** 8**SECTION 15: REGULATORY INFORMATION****15.1 US Federal Regulations**

<b>SB-2</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substance Control Act) Inventory	
<b>Polymaleic acid (26099-09-2)</b>	
Listed on the United States TSCA (Toxic Substance Control Act) Inventory	
<b>Phosphoric acid (7664-38-2)</b>	
Listed on the United States TSCA (Toxic Substance Control Act) Inventory	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard

**15.2 US State Regulations**

<b>Phosphoric acid (7664-38-2)</b>	
U.S. Massachusetts	Right to Know (RTK) List
U.S. New Jersey	RTK - Hazardous Substance List
U.S. Pennsylvania	RTK - Environmental Hazard List
U.S. Pennsylvania	RTK List

**15.3 NSF Standard 60:** Certified for use in potable water tank cleaning, pipe line cleaning, and filter cleaning**SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION****Date of Issue:** 09/08/2003**Revision Date:** 07/15/2018 Version: 6.1 (English US)**HS Tariff Classification Number:** 3402.28.0920 preference criterion A**Other Information:** This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.**GHS Full Text Phrases:**

Acute Tox. 4 (Inhalation: mist)	Acute toxicity (inhalation: mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B



H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H402	Harmful to aquatic life

**Disclaimer:** The information contained in this SDS was compiled using the latest and most reliable information available at the time of printing. The information contained herein is based on data considered accurate and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product, and, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the user thereof.



## SECTION 1: IDENTIFICATION

### 1.1 Product Identifier

Product Name: Steel Brite II  
Synonyms: Steel Brite 2, SB2  
Product Form: Liquid, mixture  
Chemical Family: Polymeric acid solution.

### 1.2 Intended Use of the Product

Use of the substance: Buffered acid solution with surfactants used to clean steel and concrete, targeting biofouling and iron staining; used at a rate of 0.4 to 1% by surface area.

Use of the substance: For professional use only

### 1.3 Contact Information of the Manufacturer

Johnson Screens / Bilfinger Water Technologies  
1950 Old Highway 8 NW  
New Brighton, MN 55112  
USA

Telephone: +1-661-323-1525  
<http://www.water.bilfinger.com/>

### 1.4 Emergency Telephone Number

Emergency Number: +1-800-262-8200 USA  
+1-703-741-5500 International  
CHEMTREC

## SECTION 2: HAZARDOUS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### Classification (GHS-US)

Met. Corr. 1 H290  
Skin Corr. 1A H314  
Eye Dam. 1 H318

Full text of H-phrases: see Section 16

### 2.2. Label Elements

GHS-US Labelling

Hazard Pictograms (GHS-US):



Signal Word (GHS-US): Danger

Hazard Statements:  
(GHS-US) H290 – May be corrosive to metals.  
H314 - Causes severe skin burns and eye damage.  
H318 - Causes serious eye damage.

Precautionary Statements:  
(GHS-US) P234 - Keep in original container.  
P260 - Do not breathe vapors, mist, or spray.  
P264 - Wash hands, forearms, and exposed areas thoroughly after handling.  
P280 - Wear eye protection, face protection, protective clothing, protective gloves.  
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 - If inhaled: Remove person 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.

P310 - Immediately call a POISON CONTROL CENTER, or a doctor.

P321 - Specific treatment (see Section 4 on this SDS).

P363 - Wash contaminated clothing before reuse.

P390 - Absorb spillage to prevent material damage.

P406 - Store in corrosive resistant container.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

### 2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. If involved in a fire and thermal decomposition occurs, potential toxic and acrid vapors may be released.

### 2.4 Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substance: Not Applicable

### 3.2 Mixture

Name	Product Identifier	Percentage	Classification (GHS-US)
Phosphoric acid	CAS No. 7664-38-2	Proprietary	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Organic acid blend	CAS No. 26099-09-2	Proprietary	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation: mist), H332 Skin Corr. 1B, H315 Eye Dam. 1, H319
Proprietary dispersant polymer	Proprietary	Proprietary	Not classified
Proprietary surfactant mixture	Proprietary	Proprietary	Not classified
Water	CAS No. 7732-18-5	Proprietary	Not classified

Note: If Chemical Name/CAS No. is "proprietary" and/or weight percentage is not listed, the specific chemical identity and/or percentage of composition has been withheld as a trade secret in accordance with 29 CFR §1910.1200. See Section 16 for the full text of H-phrases.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**First-aid Measures after Inhalation:** Keep at rest and in a position comfortable for breathing. Seek medical attention. Symptoms may be delayed.

**First-aid Measures after Skin Contact:** Remove/Take off immediately all contaminated clothing. Immediately flush skin with plenty of water and mild soap for at least 30 minutes. Seek medical advice/attention. Wash contaminated clothing before reuse.

**First-aid Measures after Eye Contact:** Immediately rinse with water for a prolonged period while holding the eyelids wide open. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 30 minutes. Immediately call a POISON CENTER or doctor/physician.

**First-aid Measures after Ingestion:** Rinse mouth thoroughly with water. Do NOT induce vomiting. Seek medical attention immediately.

### 4.2 Most Important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Causes severe skin burns and eye damage.

**Symptoms/Injuries after Inhalation:** Inhalation may cause immediate severe irritation progressing quickly to chemical burns. Corrosive to mucus membranes. Corrosive to the respiratory tract. Symptoms may be delayed.

**Symptoms/Injuries after Skin Contact:** Causes severe skin burns.

**Symptoms/Injuries after Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries after Ingestion:** May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Ingestion of a small quantity of this material could result in serious health hazard.

**Chronic Symptoms:** None expected under normal conditions of use.

### 4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread product.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Reacts with (strong) oxidizers: (increased) risk of fire. Contact with metals may evolve flammable hydrogen gas.

### 5.3. Advice for Firefighters Precautionary Measures **Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

**Firefighting Instructions:** Keep upwind. Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid enter sewers or waterways.

**Other Information:** Do not allow the product to be released into the environment. Do not allow run-off from fire fighting to enter drains or water sources.

## SECTION 6: Accidental Release Measures

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all unnecessary exposure. Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist, or spray.

#### 6.1.1 For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel. Keep upwind.

#### 6.1.2 For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### 6.2 Environmental Precautions

Avoid unnecessary release into the environment. Notify authorities if undiluted product enters sewers or public waters.

### 6.3 Methods and Material for Containment and Cleaning Up **For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Ventilate area. Clean up spills immediately and dispose of waste safely. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Collect absorbed material and place into a sealed, labeled container for proper disposal. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

### 6.4 Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see Section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for Safe Handling

**Additional Hazards When Processed:** Any proposed use of this product in an elevated temperature process should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in areas where product is used.

**Storage Conditions:** Store in a dry, cool, and well-ventilated area. Keep container closed when not in use. Store away from oxidizers and caustic products. Storage areas should be periodically checked for damage and integrity.

**Incompatible Products:** Strong oxidizers. Strong bases.

### 7.2 Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Observe all regulations and local requirements regarding storage of containers. Container remains hazardous when empty, unless properly cleaned. Continue to observe all precautions. Containers and equipment used to handle this product should be exclusively for this material.

### 7.3 Specific End Use(s)

Buffered acid solution with surfactants used to clean steel and concrete, targeting biofouling and iron staining; used at a rate of 0.4 to 1% by surface area.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control Parameters

For substances listed in Section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Phosphoric acid (7664-38-2)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
USA ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	1000 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>

### 8.2 Exposure Controls

#### Appropriate Engineering Controls:

Emergency eye wash fountain should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilations, especially in confined areas. Ensure all national/local regulations are observed.

#### Personal Protective Equipment:

Face shield. Protective goggles. Protective clothing. Gloves.  
Insufficient ventilation: wear respiratory protection.



<b>Materials for Protective Clothing:</b>	Chemically resistant materials and fabrics.
<b>Hand Protection:</b>	Impermeable protective gloves.
<b>Eye Protection:</b>	A full face shield is recommended. Chemical safety goggles.
<b>Skin and Body Protection:</b>	Wear suitable protective clothing.
<b>Respiratory Protection:</b>	Use a NIOSH approved respirator or self-contained-breathing-apparatus whenever exposure may exceed established Occupational Exposure Limits.
<b>Environmental Exposure Controls:</b>	Do not allow the product to be released into the environment.
<b>Consumer Exposure Controls:</b>	Do not eat, drink, or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical and Chemical Properties

Physical State:	Liquid	Odor:	Slight chemical odor
Appearance:	Clear	Auto Ignition Temp:	Non-detect (none)
pH:	1 - 2	Specific Gravity:	1.34
Boiling point:	118 °C (244.4°F)	Freezing point:	0 °C (32 °F) – clouding will occur
Vapor Density:	1.0 (water)	Vapor pressure:	Vapor is water
Solubility:	Water (complete)		

9.2 **Other Information:** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:** Reacts with (strong) oxidizers: increased risk of fire. Contact with metals may evolve release of flammable hydrogen gas.

**10.2 Chemical Stability:** Stable under recommended handling and storage conditions (see Section 7).

**10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**10.4 Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, open flames, sources of ignition and incompatible materials.

**10.5 Incompatible Materials:** Strong oxidizers. Strong bases. Light metals and their alloys. Galvanized surfaces.

**10.6 Hazardous Decomposition Products:** Acrid smoke and irritating fumes. Hydrogen. Corrosive vapors.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxicological Effects

**Acute Toxicity:** Not Classified.

Phosphoric acid (7664-38-2)	
LD50 Oral Rat	1530 mg/kg
LD50 Dermal Rabbit	2740 mg/kg
LC50 Inhalation Rat	>850 mg/m <sup>3</sup> (exposure time: 1 hour)

**Skin Corrosion/Irritation:** Causes severe skin burns and eye damage; pH: 1-2.

**Serious Eye Damage/Irritation:** Causes serious eye damage; pH: 1-2.

**Respiratory or Skin Sensitization:** Not Classified.

**Germ Cell Mutagenicity:** Not Classified.

**Carcinogenicity:** Not Classified.

**Reproductive Toxicity:** Not Classified.

**Specific Target Organ Toxicity (single exposure):** Not Classified.

**Specific Target Organ Toxicity (repeated exposure):** Not Classified.

**Aspiration Hazard:** Not Classified.

**Symptoms/Injuries after Inhalation:** Inhalation of mist may cause immediate severe irritation progressing quickly to chemical burns. Corrosive to respiratory tract. Symptoms may be delayed.

**Symptoms/Injuries after Skin Contact:** Causes severe burns.

**Symptoms/Injuries after Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries after Ingestion:** May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Swallowing a large quantity of this material will result in a serious health hazard.

**Chronic Symptoms:** None expected under normal conditions of use.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

**Ecology – General:** This material is hazardous to the aquatic environment in large quantities. Keep out of sewers and waterways unless neutralized and/or diluted.

**Ecology – Water:** This material is hazardous to the aquatic environment in large quantities. Keep out of sewers and waterways unless neutralized and/or diluted.

**LC50 Fish 1:** > 5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])

**EC50 Daphnia 1:** 44 mg/l

**12.2 Persistence and Degradability:** No additional information available

**12.3 Bioaccumulation Potential:**

**Log Pow:** -1.11 (at 19°C)

**12.4 Mobility in Soil:** Product is slightly viscous and has limited mobility in soils.

**12.5 Other Adverse Effects:** No additional information available

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste Treatment Methods

**Sewage Disposal Recommendations:** Diluted product will not disrupt waste water treatment. Do not empty into drains; dispose of this material and its container in a safe way.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

## SECTION 14: TRANSPORTATION INFORMATION

### 14.1 In Accordance with DOT

Not regulated as a hazardous material by the US Dept. of Transportation (DOT) 49CFR 172.101 Hazardous Materials Table

**Proper Shipping Name:** COMPOUND, LIQUID, CLEANING, CORROSIVE, PHOSPHORIC ACID SOLUTION

**Hazard Class:** 8

**Identification Number:** UN/NA1805

**Label Codes:** 8

**Packing Group:** III

### 14.2 In Accordance with IMDG

**Proper Shipping Name:** COMPOUND, LIQUID, CLEANING, CORROSIVE, PHOSPHORIC ACID SOLUTION

**Hazard Class:** 8

**Identification Number:** UN/NA1805

**Packing Group:** III

**Label Codes:** 8

**EmS-No. (Fire):** F-A

**EmS-No. (Spillage):** S-B**14.3 In Accordance with IATA****Proper Shipping Name:** COMPOUND, LIQUID, CLEANING, CORROSIVE, PHOSPHORIC ACID SOLUTION**Packing Group:** III**Identification Number:** UN/NA1805**Hazard Class:** 8**Label Codes:** 8**ERG Code (IATA):** 8L**14.4 In Accordance Canadian TDG****Proper Shipping Name:** COMPOUND, LIQUID, CLEANING, CORROSIVE, PHOSPHORIC ACID SOLUTION**Hazard Class:** 8**Label Codes:** 8**SECTION 15: REGULATORY INFORMATION****15.1 US Federal Regulations**

<b>SB-2</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substance Control Act) Inventory	
<b>Polymaleic acid (26099-09-2)</b>	
Listed on the United States TSCA (Toxic Substance Control Act) Inventory	
<b>Phosphoric acid (7664-38-2)</b>	
Listed on the United States TSCA (Toxic Substance Control Act) Inventory	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard

**15.2 US State Regulations**

<b>Phosphoric acid (7664-38-2)</b>	
U.S. Massachusetts	Right to Know (RTK) List
U.S. New Jersey	RTK - Hazardous Substance List
U.S. Pennsylvania	RTK - Environmental Hazard List
U.S. Pennsylvania	RTK List

**15.3 NSF Standard 60:** Certified for use in potable water tank cleaning, pipe line cleaning, and filter cleaning**SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION****Date of Issue:** 03/30/2004**Revision Date:** 07/15/2018 Version: 8.1 (English US)**HS Tariff Classification Number:** 3402.28.0920 preference criterion A**Other Information:** This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.**GHS Full Text Phrases:**

Acute Tox. 4 (Inhalation: mist)	Acute toxicity (inhalation: mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1



# Steel Brite II Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H402	Harmful to aquatic life

**Disclaimer:** The information contained in this SDS was compiled using the latest and most reliable information available at the time of printing. The information contained herein is based on data considered accurate and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product, and, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the user thereof.

## SECTION 1: IDENTIFICATION

### 1.1 Product Identifier

Product Name: Passivator Rinse  
Synonyms: PR, Neutralizing Agent  
Product Form: Liquid, mixture  
Chemical Family: Polymeric ester blend.

### 1.2 Intended Use of the Product

Use of the substance: Solution used to enhance cleaning activity by aiding in the neutralization of cleaning agents and passivating metal surfaces ; used at a rate of 0.5 to 5%

\Use of the substance: For professional use only

### 1.3 Contact Information of the Manufacturer

Johnson Screens / Bilfinger Water Technologies  
1950 Old Highway 8 NW  
New Brighton, MN 55112  
USA  
Telephone: +1-661-323-1525  
<http://www.water.bilfinger.com/>

### 1.4 Emergency Telephone Number

Emergency Number: +1-800-262-8200 USA  
+1-703-741-5500 International  
CHEMTREC

## SECTION 2: HAZARDOUS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### Classification (GHS-US)

Skin Irrit. 2 H315  
Eye Irrit. 2A H319  
Aquatic Chronic 3 H402

Full text of H-phrases: see Section 16

### 2.2. Label Elements

GHS-US Labelling

Hazard Pictograms (GHS-US):



Signal Word (GHS-US):

Warning

Hazard Statements:

H315 - Causes skin irritation.

(GHS-US)

H319 - Causes serious eye irritation.

Precautionary Statements:

P234 - Keep in original container.

(GHS-US)

P260 - Do not breathe vapors, mist, or spray.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear eye protection, face protection, protective clothing, protective gloves.

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 - If inhaled: Remove person 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.

P310 - Immediately call a POISON CONTROL CENTER, or a doctor.

P321 - Specific treatment (see Section 4 on this SDS).  
 P363 - Wash contaminated clothing before reuse.  
 P390 - Absorb spillage to prevent material damage.  
 P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

## 2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. If involved in a fire and thermal decomposition occurs, potential toxic and acrid vapors may be released.

## 2.4 Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substance: Not Applicable

### 3.2 Mixture

Name	Product Identifier	Percentage	Classification (GHS-US)
2-Propenoic acid, polymer with sodium phosphinate	71050-62-9 (CAS No)	Proprietary	Skin Corr. 1B, H319
Potassium hydroxide	CAS No. 1310-58-3	Proprietary	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H315 Eye Dam. 1, H319
Proprietary dispersant polymer	Proprietary	Proprietary	Not classified
Proprietary wetting agent	Proprietary	Proprietary	Not classified
Water	CAS No. 7732-18-5	Proprietary	Not classified

Note: If Chemical Name/CAS No. is "proprietary" and/or weight percentage is not listed, the specific chemical identity and/or percentage of composition has been withheld as a trade secret in accordance with CFR §1910.1200.

See Section 16 for the full text of H-phrases.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**First-aid Measures after Inhalation:** Keep at rest and in a position comfortable for breathing. Seek medical attention. Symptoms may be delayed.

**First-aid Measures after Skin Contact:** Remove/Take off immediately all contaminated clothing. Immediately flush skin with plenty of water and mild soap for at least 30 minutes. Seek medical advice/attention. Wash contaminated clothing before reuse.

**First-aid Measures after Eye Contact:** Immediately rinse with water for a prolonged period while holding the eyelids wide open. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 30 minutes. Immediately call a POISON CENTER or doctor/physician.

**First-aid Measures after Ingestion:** Rinse mouth thoroughly with water. Do NOT induce vomiting. Seek medical attention immediately.

### 4.2 Most Important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Causes mild skin irritation and possible severe eye irritation.

**Symptoms/Injuries after Inhalation:** Inhalation may cause immediate severe irritation progressing quickly to chemical burns. Corrosive to mucus membranes. Corrosive to the respiratory tract. Symptoms may be delayed.

**Symptoms/Injuries after Skin Contact:** Causes severe skin irritation.

**Symptoms/Injuries after Eye Contact:** Causes serious eye irritation.

**Symptoms/Injuries after Ingestion:** May cause irritation of the linings of the mouth, throat, and

gastrointestinal tract. Ingestion of a large quantity of this material could result in serious health hazard.

**Chronic Symptoms:** None expected under normal conditions of use.

#### 4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

### SECTION 5: FIRE FIGHTING MEASURES

#### 5.1 Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread product.

#### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Reacts with (strong) oxidizers: (increased) risk of fire. Contact with metals may evolve flammable hydrogen gas.

#### 5.3. Advice for Firefighters Precautionary Measures Fire:

Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

**Firefighting Instructions:** Keep upwind. Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid enter sewers or waterways.

**Other Information:** Do not allow the product to be released into the environment. Do not allow run-off from fire fighting to enter drains or water sources.

### SECTION 6: Accidental Release Measures

#### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all unnecessary exposure. Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist, or spray.

##### 6.1.1 For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel. Keep upwind.

##### 6.1.2 For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

#### 6.2 Environmental Precautions

Avoid unnecessary release into the environment. Notify authorities if undiluted product enters sewers or public waters.

#### 6.3 Methods and Material for Containment and Cleaning Up For Containment:

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Ventilate area. Clean up spills immediately and dispose of waste safely. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Collect absorbed material and place into a sealed, labeled container for proper disposal. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

#### 6.4 Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see Section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for Safe Handling

**Additional Hazards When Processed:** Any proposed use of this product in an elevated temperature process should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink, or smoke in areas where product is used.

**Storage Conditions:** Store in a dry, cool, and well-ventilated area. Keep container closed when not in use. Store away from oxidizers and caustic products. Storage areas should be periodically checked for damage and integrity.

**Incompatible Products:** Strong oxidizers. Strong bases.

### 7.2 Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Observe all regulations and local requirements regarding storage of containers. Container remains hazardous when empty, unless properly cleaned. Continue to observe all precautions. Containers and equipment used to handle this product should be exclusively for this material.

### 7.3 Specific End Use(s)

Solution used to enhance acid cleaning activity; use at a rate of 0.5 to 5.0% of the cleaning solution; for professional use only.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control Parameters

For substances listed in Section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

**Potassium hydroxide (CAS No. 1310-58-3) (minor constituent, <3%)**

**USA ACGIH:** ACGIH Ceiling (mg/m<sup>3</sup>) 2 mg/m<sup>3</sup>

**USA NIOSH:** NIOSH REL (ceiling) (mg/m<sup>3</sup>) 2 mg/m<sup>3</sup>

### 8.2 Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountain should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilations, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Face shield. Protective goggles. Protective clothing. Gloves. Insufficient ventilation: wear respiratory protection.



**Materials for Protective Clothing:**

Corrosion proof materials and fabrics.

**Hand Protection:**

Impermeable protective gloves.

**Eye Protection:**

A full face shield is recommended. Chemical safety goggles.

**Skin and Body Protection:**

Wear suitable protective clothing.

**Respiratory Protection:**

Use a NIOSH approved respirator or self-contained-breathing-apparatus whenever exposure may exceed established Occupational Exposure Limits.

**Environmental Exposure Controls:** Do not allow the product to be released into the environment.  
**Consumer Exposure Controls:** Do not eat, drink, or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical and Chemical Properties

Physical State:	Liquid	Odor:	Mild chemical odor
Appearance:	opaque, white	Auto Ignition Temp:	Non-detect (none)
pH:	9.0	Specific Gravity:	1.18
Boiling point:	103 °C (218 °F)	Freezing point:	0 °C (32 °F) – clouding will occur
Vapor Density:	1.0 (water)	Vapor pressure:	Vapor is water
Solubility:	Water (complete)		

9.2 **Other Information:** No additional information

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:** Reacts with (strong) oxidizers: increased risk of fire. Undiluted products contact with metals may evolve release small quantities of hydrogen gas.

**10.2 Chemical Stability:** Stable under recommended handling and storage conditions (see Section 7).

**10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**10.4 Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, open flames, sources of ignition and incompatible materials.

**10.5 Incompatible Materials:** Strong oxidizers. Strong bases.

**10.6 Hazardous Decomposition Products:** Acrid smoke and irritating fumes.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxicological Effects

**Inhalation – Acute:** No test data available

**Inhalation – Chronic:** No test data available

**Skin Contact – Acute:** Slight irritation, rabbit

**Skin Contact – Chronic:** Slight irritation, rabbit

**Eye Contact – Acute:** Slight irritation, rabbit

**LD50 Oral Rat:** 13,800 mg/kg

**Skin Corrosion/Irritation:** May cause skin irritation. pH: 7.5

**Serious Eye Damage/Irritation:** May cause eye irritation. pH: 7.5

**Respiratory or Skin Sensitization:** Not Classified.

**Germ Cell Mutagenicity:** Not Classified.

**Carcinogenicity:** Not Classified.

**Reproductive Toxicity:** Not Classified.

**Specific Target Organ Toxicity (single exposure):** Not Classified.

**Specific Target Organ Toxicity (repeated exposure):** Not Classified.

**Aspiration Hazard:** Not Classified.

**Symptoms/Injuries after Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries after Skin Contact:** May cause skin irritation.

**Symptoms/Injuries after Eye Contact:** May cause serious eye irritation.

**Symptoms/Injuries after Injection:** Ingestion of undiluted product is likely to be harmful or have adverse effects.

**Chronic Symptoms:** None expected under normal conditions of use.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

**Ecology – General:** This material is not considered hazardous to the aquatic environment. Keep out of sewers and waterways unless diluted.

**Ecology – Water:** This material is not considered hazardous to the aquatic environment. Keep out of sewers and waterways unless diluted.

**LC50 Bluegill, 72H:** > 5000 mg/l

**EC50 Daphnia 1, 48H:** > 2000 mg/l

## 12.2 Persistence and Degradability

**BOD (5) 1.0% solution:** 7950 mg O<sub>2</sub>/L

**BOD (5) 0.1% solution:** 725 mg O<sub>2</sub>/L

**Total Organic Carbon:** 2.2%

**12.3 Bioaccumulation Potential:** Non-bioaccumulating

**12.4 Mobility in Soil:** Undiluted product is slightly viscous and has limited mobility in soils.

**12.5 Other Adverse Effects:** Avoid release of undiluted product into the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste Treatment Methods

**Sewage Disposal Recommendations:** Diluted product will not disrupt waste water treatment. Do not empty into drains; dispose of this material and its container in a safe way.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

## SECTION 14: TRANSPORTATION INFORMATION

### 14.1 In Accordance with DOT

Not regulated as a hazardous material by the US Dept. of Transportation (DOT) 49CFR 172.101 Hazardous Materials Table

### 14.2 In Accordance with IMDG

Not regulated for transport.

### 14.3 In Accordance with IATA

Not regulated for transport.

### 14.4 In Accordance Canadian TDG

Not regulated for transport.

**Hazard Class:** Non-Hazardous

**Label Codes:** None Required

**Reportable Quantity:** None

## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

**RCRA Status:** Not a hazardous waste under RCRA 40 CFR 261. No reportable quantities.

**SARA/TITLE III-CERCLA List:** This product does not contain a "CERCLA" listed hazardous substance for emergency release notification under Sec. 304 (40CFR 302).

**SARA/TITLE III-Toxic Chemicals List:** This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Sec. 313 (40CFR 372).

**TSCA Inventory Status:** Chemical components listed on TSCA Inventory.

**California Proposition 65:** This product does not contain any chemicals currently on the California list of known carcinogens and reproductive toxins.

**15.2 US State Regulations:** Neither this product nor its chemical components appear on any US state lists.

**15.3 Canadian WHMIS Classification:** This product does not contain any hazardous materials under CPR and this MSDS discloses all information elements required by the CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Date of Issue:** 10/06/2003

**Revision Date:** 07/15/2018 Version: 6.1 (English US)



# Passivator Rinse Safety Data Sheet

Page 7 of 7

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**HS Tariff Classification Number:** 3402.90.5030 preference criterion B

**Other Information:** This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

## GHS Full Text Phrases:

Acute Tox. 4 (Inhalation: mist)	Acute toxicity (inhalation: mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled

**Disclaimer:** The information contained in this SDS was compiled using the latest and most reliable information available at the time of printing. The information contained herein is based on data considered accurate and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product, and, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the user thereof.