

JOHNSON SCREENS

A Weatherford Company

Material Safety Data Sheet

SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Steel Brite II

Part Number:

Chemical Family: Inorganic acid plus dispersant and inhibitor

Manufacturer's Name: Johnson Screens / A Weatherford Company

Address: P.O. Box 64118 – St. Paul, MN 55164

Product/Technical Information Phone Number: 651-636-3900

Medical/Handling Emergency Phone Number: CHEMTREC 1-800-424-9300

Transportation Emergency Phone Number: CHEMTREC 1-800-424-9300

Issue Date: 03-30-04

Revision Date/Revision Number: 05-14-04 / 2

SECTION 2 – COMPOSITION INFORMATION

	% by Weight	
Phosphoric Acid	Less than 20%	Food Grade
Orthophosphoric Acid (CAS # 7664-38-2)		

SECTION 3 - HAZARDS IDENTIFICATION

Appearance & Odor: Colorless to lightly colored liquid; nil odor

Emergency Overview: Overexposure may aggravate disorders of the skin / respiratory system

Fire & Explosion Hazards: None currently known

Primary Route(s) of Exposure: Skin, eyes, digestive tract, respiratory system

Inhalation – Acute Effects: May cause irritation / coughing

Skin Contact – Acute Effects: May cause severe irritation; prolonged or repeated skin contact may cause burns, irreversible damage

Eye Contact – Acute Effects: May cause severe irritation / burns; prolonged or repeated eye contact may cause irreversible damage or blindness

Ingestion – Acute Effects: May cause irritation, burns, pain, nausea, vomiting, shock symptoms (rapid pulse, sweating, collapse)

SECTION 4 - FIRST AID MEASURES

Inhalation First Aid: Remove affected person from area to fresh air and provide oxygen if breathing is difficult. Give artificial respiration ONLY if breathing has stopped and give CPR ONLY if there is no breathing and no pulse. Obtain medical attention.

Skin Contact First Aid: Immediately remove clothing from affected area and wash skin for 15 minutes with flowing water and soap. Clothing should be discarded or washed before reuse. Obtain medical assistance if irritation develops.

Eye Contact First Aid: Immediately irrigate eyes with flowing water continuously for 15 minutes while holding eyes open. Contacts should be removed before or during flushing. Obtain medical attention immediately.

Ingestion First Aid: If victim is alert and not convulsing, rinse mouth with water and give plenty of water to drink. If spontaneous vomiting occurs, have affected person lean forward with head down to avoid breathing in of vomitus. Rinse mouth again and give more water to drink. Obtain medical attention.

Medical Conditions Aggravated: Persons with pre-existing skin disorders or eye problems, or impaired respiratory function may be more susceptible to the effects of the substance.

Note to Physician: May give oxygen if breathing difficulty following exposure. Observe for possible delayed reactions.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point/Method: N/A

Auto Ignition Temperature:

Upper/Lower Explosion Limits: Not determined

Extinguishing Media: Chemical type foam, CO₂ (Carbon Dioxide), dry chemical, water fog

Fire Fighting Procedures: Not considered a fire hazard

Fire & Explosion Hazards: Is not flammable, however the following can occur during a fire: phosphorus oxides and/or phosphine from thermal decomposition and hydrogen from reactive metals.

Hazardous Products of Decomposition and/or Combustion: Oxides of phosphorus

NFPA Ratings:

HEALTH	FLAMMABILITY	REACTIVITY	OTHER	
2	0	0		
0 = Insignificant	1 = Slight	2 = Moderate	3 = High	4 = Extreme

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Small spill: neutralize acid spill with alkali such as soda ash, sodium bicarbonate, limestone or lime. Absorb material with an inert material such as sand, vermiculite, diatomaceous earth or other absorbent material and place in chemical waste container to be disposed at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal. Adequate ventilation is required for soda ash due to the release of carbon dioxide gas. No smoking in spill area.

Large spill: contain with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining spill with an inert material such as sand, vermiculite or other absorbent material and place in chemical waste container to be disposed at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal. Neutralize residue with alkali such as soda ash, sodium bicarbonate, limestone or lime. Adequate ventilation is required for soda ash due to the release of carbon dioxide gas. No smoking in spill area.

Release Notes: If spill could potentially enter any waterway, including intermittent dry creeks, contact the local authorities. If in the U.S., contact the US COAST GUARD NATIONAL RESPONSE CENTER toll free number 800-424-8802. In case of accident or road spill notify: CHEMTREC in USA at 800-424-9300; CANUTEC in Canada at 613-996-6666; CHEMTREC in other countries at (International code)+1-703-527-3887.

Comments: See Section 13 for disposal information and Section 15 for regulatory requirements. Large and small spills may have a broad definition depending on the user's handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel.

SECTION 7 – HANDLING AND STORAGE

Handling: For industrial use only. Some heat is generated upon dilution with water. When diluting, add product slowly to water with agitation. Never add water to the acid as some splashing could result. Always add acid to water. ATTENTION: This container hazardous when emptied. Since emptied container contains product residues (vapor or liquid), all labeled hazard precautions must be observed.

Storage: Keep container closed when not in use. Keep out of reach of children.

General Comments: Wear protective equipment when handling. Use only with adequate ventilation. Wash thoroughly after handling. Do not breathe vapor, mist, or dust. Do not get in eyes, on skin, or clothing. Do not swallow.

SECTION 8 – PERSONAL PROTECTION/EXPOSURE CONTROL

Respiratory Protection: If exposure limits are exceeded, or if exposure may occur, use a NIOSH/MSHA respirator approved for your conditions of exposure. Refer to the most recent NIOSH publications concerning chemical hazards, or consult your safety equipment supplier. Respiratory protection programs must be in compliance with OSHA requirements in 29 CFR 1910.134. For emergencies, a NIOSH/MSHA approved positive pressure breathing apparatus should be readily available.

Skin Protection: Acid proof gloves; clean, body covering clothing; rubber apron; rubber boots

Eye Protection: Chemical goggles or faceshield (ANSI Z87.1 or approved equivalent). Always wear eye protection when working with chemicals. Do not wear contact lenses when working with chemicals.

Ventilation Protection: Adequate ventilation is required to minimize exposure or to maintain exposure levels below OSHA/ACGIH requirements. Mechanical general ventilation is usually adequate. Local mechanical ventilation may be required.

Other Protection: Safety shower, eye wash fountain, and washing facilities should be readily available. In case of emergency or when dusting, misting, or splashing may occur, wear respiratory protection, eye protection, gloves, helmet, boots, and complete protective body covering.

Exposure Limits:

OSHA	ACGIH	NIOSH	SUPPLIER
TWA/TLV (ppm)	TWA/TLV (ppm)	None	AEL=20 mg/m ³ – 8 & 12 hrs TWA
0.25	0.25		

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor: Colorless to lightly colored liquid, no odor

Vapor Pressure: 5.700 @ 68° F.

Boiling Point: 245° F.

Specific Gravity: 1.34 @ 70° F.

Volatile Percentage: Not determined

Flash Point/method: N/A

Other:

Vapor Density (Air=1): Not determined

Solubility in Water: Complete

pH: aqueous approx. 1.000 to 2.000

Auto Ignition Temperature: None

Upper/Lower Explosion Limits: None

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use
Incompatibilities: Inorganic bases, metals/metal blends; contact with some metals can generate explosive hydrogen gas
Polymerization: Will not occur
Decomposition: Oxides of phosphorus and/or phosphine from thermal decomposition and hydrogen gas from reaction with metals
Conditions to Avoid: High temperature or contact with strong bases or oxidizing agents

SECTION 11 - TOXICOLOGICAL INFORMATION

Inhalation – Acute: LC₅₀ (guinea pig, mouse, rat, rabbit): 61-1,689 mg/m³ (acute values for 75-85% acid)
Inhalation – Chronic: Not established
Skin Contact – Acute: LD₅₀ (rabbit): >1,260 to > 3,160 mg/kg (acute values for 75-85% acid)
Skin Contact – Chronic: Skin irritation
Eye Contact – Acute:
Ingestion – Acute: Oral LD₅₀ (rat): >5000 mg/kg
Ingestion – Chronic:
Carcinogenicity/Mutagenicity: No components present in excess of 0.1% by weight are listed as carcinogens by IARC, NTP, or OSHA
Reproductive Effects: 375 mg/kg bw did not affect offspring growth in rats
Neurotoxicity: None known
Other Effects: In vitro bacterial genetic toxicity negative
Target Organs: Overexposure may cause damage to all body tissues

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: acute toxicity to fish: 96 hour LC₅₀: 3.0 – 3.5 mg/L (15 to 17.5 mg/L of concentrated product)

Acute toxicity to Daphnia: survival rate depends on pH

Environmental Fate: phosphoric acid undergoes ionic dissociation in water.

Toxicity: Moderately toxic to aquatic organisms as defined by USEPA (exhibited by concentrated phosphoric acid)

Degradation Products: while acidity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems.

SECTION 13 – DISPOSAL CONSIDERATIONS

Material that cannot be used or chemically reprocessed and empty containers should be disposed of in accordance with all applicable regulations. Product containers should be thoroughly emptied before disposal. Generators of waste material are required to

evaluate all waste for compliance with RCRA and any local disposal procedures and regulations. NOTE: State and local regulations may be more stringent than federal regulations.

SECTION 14 – TRANSPORTATION INFORMATION

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DOT Shipping Description:

Proper Shipping Name: Commercial commodity containing less than 20% phosphoric acid

Hazard Class: 8, UN1805, PG III, Non hazardous as ORM-D (49CFR.173.154)

Label Requirements: CORROSIVE required on larger containers; not required if shipped in containers of 4 liters or less with total package weight <66 lbs. (30 kg)

Reportable Quantity: None

European Transportation: ADR/RID Hazard Classification: 8 ADR/RID Item Number: 17°C
U.S. Custom Harmonization Number: 2809.20.00.30

SECTION 15 – REGULATORY INFORMATION

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SARA Hazard Category: This product has been reviewed according to the EPA Hazard Categories promulgated under Section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire: No Pressure Generating: No Reactivity: No Acute: Yes Chronic: No

40 CFR Part 355 – Extremely Hazardous Substances: None

TSCA Inventory Status: Chemical components listed on TSCA Inventory

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

SECTION 16 – OTHER INFORMATION

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Disclaimer: The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the user thereof. It is the buyer's responsibility to ensure that its activities comply with federal, state, provincial and local laws.