

<b>Health</b>	2
<b>Flammability</b>	0
<b>Reactivity</b>	2

<b>Section 1</b>	<b>Identification</b>
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Product Name:	Boiler 100	Company:	Tower Water
Product Description:	Boiler Water Treatment		5 Shirley Avenue
Transport Emergency:	Tower Water		Somerset, New Jersey 09973
	800-255-3294		800-669-9636

<b>Section 2</b>	<b>Hazard Identification</b>
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Hazard Classification:	Skin Corrosion Category 1, Sub-Category B Serious Eye Damage Category 1
Signal Word:	<b>Danger</b>
Hazard Statements:	Causes severe skin burns and eye damage. Causes serious eye damage.



Precautionary statements

Prevention:	Wash affected body parts thoroughly after handling. Keep out of reach of children. Read label before use. Wear protective gloves. Wear chemical protective clothing. Wear safety goggles Wear face shield. Do not breathe mist/spray. In case of inadequate ventilation, wear respiratory protection.
Response:	If swallowed: Do not induce vomiting. Rinse mouth with water. Give water to drink, if conscious. Immediately call a POISON CENTER or a physician. If on skin (or hair): Wash with plenty of water. For specific treatment (see Section 4). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a doctor
Storage:	See Section 7
Disposal:	Dispose of contents/container in accordance with federal, state, and local regulations.

<b>Section 3</b>	<b>Composition/Information on Ingredients</b>
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<u>Chemical</u>	<u>CAS Number</u>	<u>Concentration (wt. %)</u>
Sodium Sulfite	7757-83-7	8 -10%
Tetrapotassium pyrophosphate	7320-34-5	6 - 10%
Potassium Hydroxide	1310-58-3	20 - 30%
Polyacrylate	9003-01-4	1 - 5%
Water	7732-18-5	Balance

<b>Section 4</b>	<b>First-Aid Measures</b>
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Eyes:	Remove contact lenses. Immediately flush with plenty of water for at least 20 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek medical attention.
Skin:	Immediately flush skin with plenty of soap and water for at least 20 minutes. Remove contaminated clothing and footwear. Wash contaminated clothing before reuse. Get medical attention if irritation develops.
Ingestion:	If swallowed, DO NOT induce vomiting. Give large amounts of water to drink. Get prompt medical attention. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person.
Inhalation:	If inhaled, remove to fresh air. If not breathing via artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
Notes to Physician:	May aggravate existing skin, eye, and lung conditions. Note: Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

<b>Section 5</b>	<b>Fire-Fighting Measures</b>
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Product is a water solution and nonflammable. In a fire, this product may build up pressure and rupture a sealed container; cool exposed containers with water spray. Use self-contained breathing apparatus in confined areas; avoid breathing mist of spray.

Extinguishing Media:	Dry chemical, carbon dioxide, water spray, or foam. For larger fires use water spray, fog, or alcohol foam.
Special Procedures:	Use self-contained breathing apparatus in confined areas; avoid breathing mist or spray. Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.
Hazardous combustion products:	Thermal decomposition may release carbon monoxide, and carbon dioxide.

<b>Section 6</b>	<b>Accidental Release Measures</b>
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Spill Response:	Stop leaks. Clean up spill immediately. Build dikes as necessary to contain flow of large spills. Do not allow liquid to enter stream or waterways. For small spills, use vinegar or citric acid to neutralize, an inert material to absorb. Place contaminated materials into containers and store in a safe place to await proper disposal. Wear adequate personal protective clothing and equipment. Caution: use of vinegar or citric acid may generate carbon dioxide gas. Provide adequate ventilation to spill area. Approved breathing apparatus may be necessary.
Spill Notification:	Determine if federal, state, and/or local release notification is required.

<b>Section 7</b>	<b>Handling and Storage</b>
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Handling:	Keep container closed. Both open and handle containers with care. Store in a cool, well ventilated place away from incompatible materials. Do NOT pressurize, cut, heat, or weld containers. Empty product containers may contain product residue. Do NOT reuse empty containers without commercial cleaning or reconditioning. Avoid contact with eyes, skin and clothing. Avoid breathing mist or vapors. Wash thoroughly after handling. Keep away from heat and open flame. Keep container closed when not in use.
Storage:	Do not use aluminum, copper or mild steel tanks, pumps or piping with this product. Store in glass, stainless steel, plastic or epoxy lined containers. Store in a cool, dry place away from direct heat. Keep container tightly closed when not in use. Do not store in unlined metal containers. This product has a shelf life of at least six months in unopened containers and when stored within the recommended temperature range.

## Section 8 Exposure Controls/Personal Protection

Chemical	OSHA PEL	ACGIH TLV	Other Exposure Limits
Potassium Hydroxide (1310-58-3)	N/A	N/A	NIOSH: 2 mg/m <sup>3</sup> (ceiling)

Exposure Controls: Local exhaust ventilation should be provided to control worker exposures and prevent health risk; and as necessary to reduce, prevent and control aerosol generation.

PPE:



Eye Protection: Wear chemical safety goggles. Have eye wash stations available where eye contact can occur.

Hand Protection: Wear gloves impervious to conditions of use.

Body Protection: Wear appropriate impervious clothing. Have safety showers available where skin contact can occur.

Respiratory Protection: Where concentrations in air may exceed limits given in this section or Section 2 and engineering, work practice or other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation (see 29 CFR 1910.134).

## Section 9 Physical and Chemical Properties

Appearance:	Straw to brown liquid	Melting point/freezing point:	Not available
Odor:	No appreciable odor	Initial boiling point and boiling range:	>212°F
Odor threshold:	Not available	Evaporation rate:	Not available
pH:	>13 (as is)	Vapor pressure:	Not available
Relative density:	1.298 (@ 25°C)	Vapor density:	Not available
Solubility:	Completely soluble	Partition coefficient:	Not available
Flammability:	Not flammable	Auto-ignition temperature:	Not applicable
Flash point:	Not applicable	Decomposition temperature:	Not available
Upper/lower flammability or explosive limits:	Not applicable	Viscosity:	Not available

## Section 10 Stability and Reactivity

Stability:	This material is stable under normal temperatures and pressures.
Possibility of hazardous reactions:	Not anticipated under normal or recommended handling and storage conditions.
Conditions to Avoid:	This material may attack soft metals like aluminum, brass, copper, magnesium and any other soft metal attacked by high alkaline mixtures containing caustic potash.
Incompatible Materials:	Strong acids
Hazardous Decomposition Products:	Thermal decomposition may release nitrogen oxides, carbon monoxide, and carbon dioxide.

<b>Section 11</b>	<b>Toxicological Information</b>
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Health Hazards:	
Eye:	Direct eye contact may cause irritation, redness, swelling and pain that can become severe on prolonged contact.
Skin:	May cause skin irritation, especially on prolonged contact.
Inhalation:	Inhalation of mist or spray may irritate respiratory tract.
Ingestion:	May be harmful if swallowed. May cause irritation of the mouth throat and stomach. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Delayed Effects:	None known
Chronic Effects:	May aggravate existing skin, eye, and lung conditions.
Carcinogen:	No ingredients listed on NTP, IARC, or OSHA
Mutagenicity/Genotoxicity:	No mutagenicity or genotoxicity studies have been carried out with this product.

<b>Section 12</b>	<b>Ecological Information</b>		
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Components/CAS-No.	Acute Algae Toxicity:	Acute Fish Toxicity:	Toxicity to daphnia and other aquatic invertebrates:
Boiler 100	No information available.	No information available.	No information available.

Mobility:	No information available.
Persistence:	No information available.
Bioaccumulative Potential:	No information available.
Chemical Fate Information:	No information available.
Other Information:	No other ecological studies have been carried out on this product.

<b>Section 13</b>	<b>Disposal Considerations</b>
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DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of. Discarded product, as sold, should not be considered a RCRA Hazardous Waste. Dispose of product in an approved chemical waste landfill or incinerate in accordance with applicable Federal, state and local regulations. Since the emptied container retains product residue, all labeled hazard precautions must be observed. Do NOT mix with other chemical wastes. Do not put solutions containing this product into sewer systems. Do not re-use empty containers.

<b>Section 14</b>	<b>Transport Information</b>
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DOT Shipping Name:	UN 3266, Corrosive liquid, basic, inorganic, n.o.s. (Potassium Hydroxide)
DOT Hazard Class:	Corrosive
UN Number:	UN3266
Packing Group:	PGII, ER-154

**Section 15****Regulatory Information**

Toxic Substances Control Act (TSCA):	All components are listed on the TSCA Inventory of Chemical Substances or are exempt from TSCA Inventory requirements.
SARA Section 311/312 Hazard Class:	Acute Health
SARA Section 313 Toxic Chemicals:	No components listed.
SARA Title III/CERCLA Reportable Quantities (RQ):	N/A
FD&C Act:	This product is not approved for use in FDA applications
RCRA:	This product is not defined under the Resource and Recovery Act (RCRA)
Clean Water Act:	Not applicable
California Proposition 65:	No components listed.
Michigan Critical Materials:	No components listed.
State Right to Know Laws:	Not applicable

**Section 16****Other Information**

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Tower Water urges each customer or recipient of this MSDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this MSDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as to the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product.

Revised By: Bruce Ketrick

Revised: 08-20-18

**\*\*\*END OF MSDS\*\*\***