

## SECTION 1 – PRODUCT AND COMPANY INFORMATION

### Product Identifiers

**Product name:** 0181 LOW PRESSURE BOILER COMPOUND  
**Product Number:** 0181  
**Product Application:** Boiler water treatment.  
**Emergency telephone number:** CHEMTREC (800) 424-9300 Poison Control: 1-800-222-1222

## SECTION 2 – HAZARD IDENTIFICATION

### Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

**Signal Word:** WARNING

**Pictograms:** Exclamation Mark, Corrosive

**Physical Hazards:** H290 May be corrosive to metals.

### Health Hazards:

Acute toxicity - Oral	Category 3
Skin corrosion/irritation	Category 3
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (one exposure)	None known
<b>Environmental Hazards:</b>	None known

### Hazard Statements:

H303 May be harmful if swallowed.  
H313 May be harmful in contact with skin.  
H320 Causes eye irritation.  
H333 May be harmful if inhaled.

### Precautionary Statements:

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood  
P270 Do not eat or drink or smoke when using this product  
P280: Wear protective gloves/protective clothing/eye protection/face protection.



## SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient	CAS	Wt%
Potassium Hydroxide	1310-58-3	<3%

## SECTION 4 – FIRST AID MEASURES

### Description of first aid measures

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

**If swallowed:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed:** None known.

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## SECTION 5 – FIREFIGHTING MEASURES

**Flammable Properties:** Non-Flammable

**Explosive Properties:** N/A

**Suitable Extinguishing media:** N/A

**Unsuitable extinguishing media:** N/A

**Special hazards arising from the substance or mixture:** Overheating in fire conditions may produce POISONOUS GASES. Potassium Hydroxide in contact with water or moisture may generate enough heat to ignite combustibles.

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Further information:** If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA Fire Brigades Standard (29 CFR 1910.156).

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## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Wear respiratory protection. Avoid dust formation. Avoid breathing vapor, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see Section 8.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up:** Keep in suitable, closed containers for disposal. Reference to other sections: For disposal see Section 13.

Product is water soluble and may be diluted and flushed as below described.

**Other Information:** This product is intended to be used in pretreatment of boiler water, and discharged to sanitary sewer in boiler blowdown water. Concentrated product may be diluted to a similar working concentration and flushed to sewer, or the concentrated solution soaked up with absorbent material and landfilled in accordance with local, state, and federal regulations.

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## SECTION 7 – HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with skin and eyes. Avoid formation of aerosols. Provide appropriate exhaust ventilation. For precautions see Section 2.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Store as a non-combustible, corrosive hazardous materials

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## SECTION 8 – EXPOSURE CONTROL AND PERSONAL PROTECTION

**Control parameters**

**Components with workplace control parameters:** Potassium hydroxide (CAS No. 1310-58-3) ACGIH Threshold Limit Values (TLV) C 2 mg/m<sup>3</sup>. 2 mg/m<sup>3</sup> NIOSH Recommended Exposure Limits.

## Exposure controls

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

**Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Dark brown liquid with slight woody odor

**pH:** 11.91

**Specific Gravity:** 1.141

**Molecular Weight:** Mixture

**Water Solubility:** Complete

**Melt/Freeze Point:** Not Determined

**Boiling Point:** 110 C / 230 F

**Flammability:** Not Flammable

**Flash Point:** N/A

**Vapor Density:** NA

**Note:** Physical Data is typical values based on material tested, but may vary based on composition. Values should not be accepted as guaranteed for every lot or as specifications for this product.

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## SECTION 10 – STABILITY AND REACTIVITY

**Reactivity:** No data available

**Chemical stability:** Stable under normal conditions of use and storage

**Possibility of hazardous reactions:** No data available

**Conditions to avoid:** None known

**Incompatible materials:** Strong acids and oxidizers.

**Hazardous decomposition products:** None known.

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## SECTION 11 – TOXICOLOGICAL INFORMATION

**Information on toxicological effects:** Acute toxicity Potassium Hydroxide LD50 Oral - Rat - 333 mg/kg.

**Inhalation:** No data available

**Skin corrosion/irritation:** No data available  
**Serious eye damage/eye irritation:** No data available  
**Respiratory or skin sensitization:** No data available  
**Germ cell mutagenicity:** No data available  
**Carcinogenicity: IARC, ACGIH, NTP, and OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** No data available  
**Specific target organ toxicity - single exposure:** No data available  
**Specific target organ toxicity - repeated exposure:** No data available  
**Aspiration hazard:** No data available  
**Additional Information:** None.

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## SECTION 12 – ECOLOGICAL INFORMATION

**Toxicity:** Toxicity to fish Potassium Hydroxide LC50 - *Gambusia affinis* (Mosquito fish) - 80 mg/l - 96 h.  
**Persistence and degradability:** No data available  
**Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available. Product is water soluble, so will likely move within the aquifer.  
**Other adverse effects:** Harmful to aquatic life.

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## SECTION 13 – DISPOSAL CONSIDERATION

### Waste treatment methods:

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

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## SECTION 14 – TRANSPORT INFORMATION (USDOT)

**Proper shipping Name:** Corrosive Liquid, N.O.S. (Contains Potassium Hydroxide Solution)  
**Hazard Class:** Corrosive (8)  
**UN/ID No** **UN1760**  
**Packing Group** II  
**Reportable Quantity (RQ)** >10,000 lbs.  
**Description:** N/A



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## SECTION 15 – REGULATORY INFORMATION

**TSCA** (Toxic Substance Control Act): Components of this product are listed on the TSCA Inventory.

**DSL:** This product, or its components, are listed on or are exempt from the Canadian Domestic Substances List (DSL).

**CERCLA:** (Comprehensive Emergency Response Compensation, and Liability Act): Product is not found in "List of Hazardous Substances and Reportable Quantities" (40 CFR 302.4): None

**RCRA:** (Resource Conservation/Recovery Act): No

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:** Acute Health Hazard

**STATES:** Massachusetts Right to Know Components, Pennsylvania Right To Know Components, New Jersey Right To Know Components: Potassium hydroxide CAS-No.1310-58-3

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## SECTION 16 – OTHER INFORMATION

### Fire Protection Association (NFPA) Ratings:



**NSF Certification:** N/A

This Safety Data Sheet compiled from information provided by the raw chemical product manufacturers.

Disclaimer: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, from failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.