

NOTICE: Judgment may be based on indirect test and technical literature. The OSHA Hazard Communication Standard only requires SDS's and special labeling for materials defined as "HAZARDOUS"; see 29 CFR 1910.1200 (c). This document may be about a product which is NOT hazardous but is provided as information for our customers. See references for information.

**SECTION 1. IDENTIFICATION**

Product Identifier: Boiler Wash	Product Identification # (PIF): 5006
Product Use: Water treatment system cleaner	Emergency Telephone #: 1-800-255-3924
Manufactured by: Ecolink	Date Prepared: November 24, 2000
PO Box 9	Date revised: September 21, 2021
Tucker, GA 30085	
www.ecolink.com	

**SECTION 2. HAZARD(S) IDENTIFICATION**

GHS Hazard Codification



Signal Word: DANGER

Hazard Class	Category	Code	Hazard Statement
Corrosive to Metals	1	H290	May be corrosive to metals
Acute Toxicity, Oral	4	H302	Harmful if swallowed
Aspiration Hazard	2	H305	May be harmful if swallowed and enters airways
Skin Corrosion/Eye Damage	1B	H314	Causes severe skin burns and eye damage
STOT, Single Exposure; Narcotic effects	3	H336	May cause drowsiness or dizziness
Hazardous to the Aquatic Environment, Acute Hazard	3	H402	Harmful to aquatic life

Precautionary	Code	Statement
Prevention	P210 P234 P260 P264 P270 P271 P273 P280	Keep away from heat/sparks/open flames/hot surfaces – No smoking. Keep only in original container. Do not breathe fumes/mists/ vapors/sprays. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response	P301+P330+P331 P310 P321 P303+P361+P353 P363 P304+P340 P310 P321 P305+P351+P338  P370+P378 P390	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. Specific treatment: See section 4 First Aid Measures IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Specific treatments: See section 4 First Aid Measures. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. In case of fire: Use foam, dry chemical, carbon dioxide fire extinguishers or water spray for extinction. Absorb spillage to prevent material damage spillage to prevent material damage.
Storage	P403+P235 P404 P405	Store in a well-ventilated place. Keep cool. Store in a closed container. Store locked up.
Disposal	P501	Dispose of contents/container in compliance with all Federal, State/Provincial and local laws and regulations

**Description of any hazards not otherwise classified:** May cause drying and flaking of the skin (dermatitis). Mists are corrosive to respiratory tract and may cause pulmonary edema (shortness of breath and tightness of chest). High vapor concentrations may cause CNS depression. Corrosive to digestive tract - May cause severe pain, burning, vomiting, diarrhea. Lung aspiration may result in chemical pneumonitis, pulmonary edema, damage to lung tissue, and in extreme cases death.

**SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredient	Common Name	CAS #	Concentration Range %
2-butyoxyethanol	Ethylene glycol monobutyl ether	111-76-2	0 -4
Sodium trioxosilicate	Sodium Metasilicate	6834-92-0	0 -4
Potassium hydroxide	Caustic potash	1310-58-3	3 - 8

**SECTION 4. FIRST AID MEASURES**

**Eyes:** Flush well with water for at least 15 minutes, holding eyelids open. Remove any contact lenses and continue rinsing. Seek medical attention immediately.

**Skin:** Remove immediately all contaminated clothing. Rinse skin with water/shower, then wash with soap and water. Continue for 15 minutes. Wash contaminated clothing before reuse. If irritation persists, seek medical attention.

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. If breathing is difficult, have trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration and call a physician. Pulmonary edema symptoms can be delayed up to 48 hours after exposure.  
**Ingestion:** DO NOT INDUCE VOMITING. If victim is completely alert and aware, rinse mouth and give 8-10oz. water to dilute. If vomiting occurs spontaneously, have victim lean forward with head down, rinse mouth and administer more water. Immediately transport victim to an emergency facility.

**SECTION 5. FIRE-FIGHTING MEASURES**

Flammability: Class IIIA Combustible liquid  
 Flash Point: >140°F (>60°C)  
**Extinguishing Media:** Foam, dry chemical, carbon dioxide fire extinguishers, water spray. Use water spray to cool containers.  
**Specific hazards arising from chemical:** May react with chemically reactive metals such as aluminum, zinc, magnesium, copper, etc. to release hydrogen gas, which can form explosive mixtures with air.  
**Hazardous combustion products:** Oxides of potassium, carbon, sodium and phosphorus.  
**Firefighting protective equipment:** Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.  
**Sensitivity to static discharge:** This product is a class IIIA combustible.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Use personal protective equipment (Section 8). Ventilate area. Do not breathe fumes/mists/vapors/sprays. Do not eat, drink or smoke when handling this product. Wash thoroughly after handling.  
**For Small Spills:** Avoid release to the environment. Spilled material may be slippery. Avoid dispersal of material and runoff into soil, waterways, drains and sewers. Neutralize with weak acidic material (citric acid), then absorb spill with vermiculite or other inert material, and then place in a container for chemical waste. Litmus paper may be used to confirm neutralization. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Wash walking surfaces with water. Dispose of contaminated absorbent material in accordance with local, state and federal regulations.  
**For Large Spills:** Large spills cannot occur due to packaging.

**SECTION 7. HANDLING AND STORAGE**

**Handling:** Wear personal protection equipment (Section 8). Use only outdoors or in a well-ventilated area. Do not breathe fumes/mists/vapors/sprays. Do not eat, drink or smoke in work areas. Do not pre-mix with other chemicals. Empty containers may contain residue and can be dangerous. Wash thoroughly after handling. Avoid release to the environment.  
**Storage:** Keep away from heat, flame, or sunlight. Keep from freezing. Keep container tightly closed when not in use. Keep only in original container. Store in a well ventilated place – keep cool. Store locked up. Protect from physical damage. Store away from strong acids and oxidizers, halogenated compounds, prolonged contact with metals or alloys, nitroaromatic, nitroparaffinic or organohalogen compounds, sugar solutions, 1,2-dichloroethylene, trichloroethylene and tetrachloroethane.

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Ingredient	CAS #	OSHA/PEL	ACGIH/TLV	STEL
2-butoxyethanol	111-76-2	50ppm	20ppm	Not established
Disodium trioxosilicate	6834-92-0	Not established	Not established	Not established
Potassium hydroxide	1310-58-3	2mg/m3	2mg/m3	Not established

**Engineering Controls:** Provide adequate ventilation. Observe occupational exposure limits and keep the risk of exposure to a minimum.

**Personal protective equipment:**

- Eye: Safety glasses with side shields or splash proof goggles and face shield.
- Skin: Chemical resistant (impervious) gloves. Normal materials handling clothing and apron.
- Respirator: Use NIOSH approved protection if PEL is exceeded, if sprays/mists are generated, or if vapor concentrations are high.
- Other: Use only in a well ventilated area. Do not eat, drink or smoke while handling. Wash thoroughly after handling.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Straw, clear liquid	Upper/Lower flammability limits	Not determined
Odor	Butyl odor	Vapor pressure	Not determined
Odor threshold	Not determined	Vapor density (Air = 1)	>1
pH (neat)	13.5	Specific gravity (water = 1.0)	1.085 g/ml
Melting point	Not determined	Solubility	Complete in water
Freezing point	Not determined	Partition coefficient (n-octanol/water)	Not determined
Boiling point	>212° F	Auto-ignition temperature	Not determined
Flash point	Not determined	Decomposition temperature	Not determined
Evaporation rate (n-butyl acetate=1)	<1	Viscosity	Not determined
Flammability	Combustible IIIA	% Volatile / volume	90

**SECTION 10. STABILITY AND REACTIVITY**

**Reactivity:** May react with chemically reactive metals such as aluminum, zinc, magnesium, copper, etc. to release hydrogen gas, which can form explosive mixtures with air. Slowly attacks glass at room temperature. Corrosive to metals.  
**Chemical stability:** Stable under normal, ambient temperature and conditions.  
**Possibility of hazardous reactions:** Hazardous polymerization will not occur, but can induce hazardous polymerization of acetaldehyde, acrolein and acrylonitrile.  
**Conditions to avoid:** Heat, flame and sparks. Keep from freezing. Do not mix with other chemicals

Incompatible materials: Avoid strong acids and oxidizers, halogenated compounds, prolonged contact with metals or alloys, nitroaromatic, nitroparaffinic or organohalogen compounds, sugar solutions, 1,2-dichloroethylene, trichloroethylene and tetrachloroethane.

Hazardous combustion products: Potassium, carbon, sodium and phosphorous oxide fumes.

#### SECTION 11. TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity (short and long term):

Oral (LD50 Rat): 284 mg/kg  
Dermal (LD50 Rabbit): Not determined  
Inhalation (LC50 Rat): Not determined  
NTP/IARC/OSHA Carcinogen: No

Eye Contact: Corrosive to eyes. Symptoms may include severe irritation, disintegration, scarring and clouding.

Skin Contact: Corrosive to skin. Symptoms may include burns, ulceration and scarring. Prolonged/repeated skin exposures can result in dermatitis.

Inhalation: Inhaling mists/sprays of material is corrosive to respiratory tract and may cause pulmonary edema (shortness of breath and tightness of chest). High vapor concentrations may cause central nervous system depression.

Ingestion: Corrosive to digestive tract - May cause severe pain, burning, vomiting and diarrhea. Lung aspiration may result in chemical pneumonitis, pulmonary edema, damage to lung tissue, and in extreme cases death.

#### SECTION 12. ECOLOGICAL INFORMATION

Aquatic Effects:

96h LC-50 (fish): 80 mg/L  
48h EC-50 (invertebrates): 60 mg/L  
96h EC-50 (algae): 61 mg/L

Persistence and degradability: Degrades readily by reacting with natural carbon dioxide in the air.

Bioaccumulation: This material is not expected to bioaccumulate significantly.

Mobility: This product is soluble in water and may spread in water systems. This product is partially volatile and may spread in the atmosphere. Soil mobility not determined.

Effects on Aquatic Life: This product can raise the pH of an aquatic environment, and thus be toxic to fish and aquatic plants. As with all chemicals, work practices should be aimed at eliminating environmental releases.

#### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Do not dump into sewers, on the ground or into any waterways. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied. Do not cut, drill, grind or weld on or near the container.

RCRA: A waste containing this product may have the RCRA hazardous waste no. D002 (Corrosive) (40 CFR 261.22).

#### SECTION 14. TRANSPORT INFORMATION

United States DOT:

UN/ID No.: UN1760  
Proper Shipping Name: Corrosive Liquids, n.o.s., (Potassium hydroxide)  
Hazard Class: 8  
Packing Group: II  
49 CFR §173.154 (b) (2) (Exemption): This product can ship as "Limited Quantity" in inner packaging not over 0.3 gallons. (Non-Hazardous)

IATA and IMDG:

UN/ID No.: UN1760  
Proper Shipping Name: Corrosive Liquids, n.o.s., (Potassium hydroxide)  
Hazard Class: 8  
Packing Group: II  
Marine Pollutant (IMDG Code): Not listed (49 CFR 172.101)  
Transportation in bulk (IMDG - Annex II of MARPOL 73/78 and IBC Code): Not offered in bulk for transport overseas.

#### SECTION 15. REGULATORY INFORMATION

TSCA: All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements under 40 CFR 720.30.

SARA Section 302: The components of this product are either not regulated or regulated, but present in negligible concentrations.

SARA TITLE III Section 311/312:

Immediate (Acute) Health	Yes	Fire Hazard	Yes
Delayed (Chronic) Health	Yes	Reactive Hazard	No

SARA Title 313: This material contains the following chemical components with known CAS numbers subject to reporting requirements (40 CFR 372): Ethylene Glycol Monobutyl Ether CAS# 111-76-2, % by wt. = 5%.

CERCLA: Potassium hydroxide (CAS# 1310-58-3) has a reportable quantity of 1,000 lbs. at 100% concentration, however, this product is not considered a Hazardous Substance since the quantity does not equal or exceed the RQ in one package (49 CFR 171.8, definition of "Hazardous Substance").

United States Right-To-Know: Potassium hydroxide (CAS #1310-58-3) - Massachusetts, Minnesota, New Jersey, Pennsylvania, Rhode Island. 2-butyoxyethanol CAS# 111-76-2 - California, Massachusetts, Minnesota, New Jersey & Pennsylvania.

Proposition 65: This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

RCRA: A waste containing this product may have the RCRA hazardous waste no. D002 (Corrosive) (40 CFR 261.22).

**SECTION 16. OTHER INFORMATION**

Date revised: August 8, 2019, revised for GHS standard

Hazard Ratings (HMIS): Health 2, Flammability 0, Reactivity 1 (Scale 0 – 4). Personal Protection Rating to be supplied by user based on use conditions.

Product VOC: 2%

Carefully read all instructions on label before handling this product.

Keep out of reach of children.

“FOR INDUSTRIAL USE ONLY”

<b>Abbreviation</b>	<b>Full Name/Explanation</b>
ACGIH	American Conference of Government Industrial Hygienists
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CNS	Central Nervous System
CFR	Code of Federal Regulations
DOT	Department of Transportation
EC	Effective Concentration
HMIS	Hazardous Material Information System
LC	Lethal Concentration
LD	Lethal Dose
NA	Not Applicable
ND	Not Determined
NE	Not Established
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation Recovery Act
SARA	Superfund Amendments and Reauthorization Act
STEL	Short-Term Exposure Limit
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
VOC	Volatile Organic Compounds

The information contained herein is based on data available to us and is believed to be correct. We make no warranty, however, expressed or implied regarding the accuracy of these data or the results obtained from the use thereof.

Regulatory Standards: DOT TITLE 49, Code of Federal Regulations 172.101: Parts 100 to 177, Revised 10/1/92.

SUPER FUND AMENDMENTS REAUTHORIZATION ACT OF 1986, TITLE III TOXIC SUBSTANCE CONTROL ACT LIST (TSCA)- INGREDIENTS LISTED, REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES NATIONAL TOXICOLOGICAL PROGRAM (NTP) REPORT OF CARCINOGENS INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPHS, OCCUPATIONAL SAFETY & HEALTH REGULATIONS. CODE OF FED. REGS. FOOD & DRUG, 21 PARTS 170 to 199, Revised 4/1/91, 173.310.