

# MATERIAL SAFETY DATA SHEET

## SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION:

**Manufactured by:**

Quip Laboratories, Inc.  
1500 Eastlawn Avenue  
Wilmington, DE 19802

**Non-Emergency: (302) 761-2600**

CHEMICAL EMERGENCY NUMBER

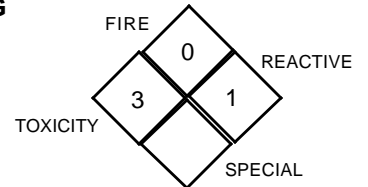
**CHEMTREC**

**1-800-424-9300**

Product Name: **ENVIRO-KLEEN 500N**  
Common Name: Potassium hydroxide solution  
Chemical Name: Potassium hydroxide  
Formula: Potassium hydroxide solution  
Product Use: Alkaline Neutralizing Compound

**HAZARD RATING**

4-EXTREME  
3-HIGH  
2-MODERATE  
1-SLIGHT  
0-INSIGNIFICANT



## SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS:

INGREDIENTS:		% / Wt.	TLV/ACGIH
Potassium Hydroxide	(C.A.S.# 1310-58-3)	20.0 - 25.0	2 mg/m <sup>3</sup>
Water	(C.A.S.# 7732-18-5)	To qs	None Established

Note: (See section 3, Health Hazard Identification, for more information)

## SECTION 3: HEALTH HAZARD IDENTIFICATION DATA:

**MOST IMPORTANT HAZARDS: Corrosive.** Can cause burns, even permanent damage to eyes, respiratory system and skin. Harmful if swallowed. May cause pain, nausea, vomiting and diarrhea.

**ROUTES OF ENTRY:** Eyes; Yes                      Skin; Yes                      Inhalation; Yes                      Ingestion; Yes

**POTENTIAL HEALTH EFFECTS:**

**EYE CONTACT:** Causes severe burns or even permanent damage. Severity depends upon concentration and duration of exposure.

**SKIN CONTACT:** Causes skin burns. Prolonged contact may cause dermatitis.

**INHALATION:** Exposure to mists generated from this material causes irritation, or even burns to the respiratory tract. May result in coughing, difficulty breathing and sore throat. Exposure to high concentrations may result in bronchospasms.

**INGESTION:** Harmful if swallowed. May cause pain, nausea, vomiting, diarrhea, weakness and fatigue.

**CARCINOGENICITY:**                      NTP; No                      IARC; No                      OSHA; No                      ACGIH: No

**CONDITIONS AGGRAVATED BY EXPOSURE:** None known.

## SECTION 4: EMERGENCY & FIRST AID PROCEDURES:

**EYE CONTACT:** Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Washing eyes within several seconds of exposure is essential to achieve maximum effectiveness. Get immediate medical attention.

**SECTION 4: EMERGENCY & FIRST AID PROCEDURES (Continued):**

**SKIN CONTACT:** Immediately flush contaminated area with water. Remove contaminated clothing and footwear. Wash contaminated areas with plenty of soap and water. Wash contaminated clothing before re-use. Discard footwear that cannot be decontaminated. Get immediate medical attention

**INHALATION:** Remove to fresh air if safe to transport. Otherwise attempt to provide fresh air by ventilation. If breathing is difficult, have a trained person administer oxygen. If not breathing, first call 911, then give artificial respiration.

**INGESTION: DO NOT INDUCE VOMITING.** Give large quantities of water (If available, give several glasses of milk to dilute). If vomiting occurs spontaneously, keep airway clear and give more water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

**NOTES TO PHYSICIAN:** No specialized procedures. Treat for clinical symptoms.

**SECTION 5: FIRE FIGHTING MEASURES:**

**FLASH POINT:** Not Applicable    **AUTO IGNITION:** Not Applicable    **LEL / UEL:** Not Applicable

**EXTINGUISHING MEDIA:** Use agents appropriate for surrounding fire. May react with water with the generation of heat.

**FIRE FIGHTING PROCEDURES:** Wear NIOSH/MSHA positive-pressure, self contained breathing apparatus and full protective clothing.

**FIRE AND EXPLOSION HAZARD:** None known.

**SECTION 6: ACCIDENTAL RELEASE MEASURES:**

**PERSONAL PRECAUTIONS:** Follow protective measures provided under Personal Protection in Section 8.

Evacuate unnecessary personnel and eliminate all sources of ignition. Contain Spill.

**ENVIRONMENTAL PRECAUTIONS:** Do not allow entry into sewers and waterways.

**METHODS FOR CLEANING UP:** For small spills, soak up with absorbent material and place in properly labeled containers for disposal.

For large spills, dike and pump into properly labeled containers for reclamation or disposal, according to local, state, and federal regulations.

**WASTE DISPOSAL METHODS:** Dispose of in a landfill or flush to a sanitary sewer in accordance with local, state and federal regulations.

**SECTION 7: HANDLING AND STORAGE:**

**HANDLING:** Use with adequate ventilation. Avoid breathing vapors. Wear personal protection equipment as described in Exposure Controls/Personal Protection (Section 8 ) of the MSDS. Never move drums with open bungs.

**SPECIAL MIXING AND HANDLING INSTRUCTIONS:** Do not allow contact with materials as noted in Section 10.

**STORAGE:** Keep container tightly closed and properly labeled. Do not store in aluminum containers or use aluminum fittings or transfer lines, as flammable hydrogen gas can be generated.

**SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION INFORMATION:**

**ENGINEERING CONTROLS:** Handle product in a well ventilated area. If product is handled in an open system, the use of process closures, local exhaust, ventilation, and/or other engineering controls should be considered to control airborne levels to below recommended exposure limits, or below acceptable levels where there are no limits.

**PERSONAL PROTECTION:**

**RESPIRATORY: A NIOSH** approved respirator with a dust, fume and mist filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure.

A respiratory protection program that meets 29CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant use of a respirator.

**SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION INFORMATION (Continued):**

**EYE/FACE:** Wear chemical safety goggles plus full face shield to protect against contact when appropriate. (ANSIZ87.1)

**SKIN:** Wear protective clothing to minimize skin contact. Wear chemical resistant glove such as rubber, neoprene or vinyl.

**OTHER:** Discard leather items that cannot be decontaminated. Emergency shower and Eyewash facility should be in close proximity (ANSI Z358.1).

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES:**

**APPEARANCE:** Clear Straw Colored Liquid

**ODOR:** Mild Chlorine Odor.

**SPECIFIC GRAVITY:** 1.22

**pH:** (1% solution in water) 13.0

**SOLUBILITY IN WATER:** Completely

**EVAPORATION RATE:** Not Applicable

**VAPOR PRESSURE:** N/A

**BOILING POINT:** Not Established

**VAPOR DENSITY (AIR = 1):** Not Applicable

**SECTION 10: STABILITY & REACTIVITY DATA:**

**INCOMPATIBLE MATERIALS:** Product is corrosive to soft metals such as tin, aluminum, zinc, copper and brass, or alloys containing these metals. Avoid contact with leather, wool, acids, organic halogen compounds, or organic nitro compounds.

**STABILITY:** Product is stable.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None.

**SECTION 11: TOXICOLOGICAL INFORMATION:**

**POTASSIUM HYDROXIDE (KOH) CAS# 1310-58-3:** This substance is alkaline and corrosive. Minimize contact. The irritating and corrosive properties of this product depend on its concentration. It is toxic by the oral route. It may cause burns and other effects to the mucus membranes, mouth and digestive tracts. Its dermal toxicity has not been determined. It may cause burns that are not immediately noticed or painful. Inhalation of dust or vapors can cause airway effects including burns. This product is irritating and corrosive to eyes and skin.

The irritating and corrosive properties of this material depend on its concentration. In general, serious injury is associated with products with a pH of 11.5 or higher.

**SECTION 12: ECOLOGICAL INFORMATION:**

**POTASSIUM HYDROXIDE (KOH) CAS# 1310-58-3:**

**TOXICITY:** This material is believed to be slightly toxic to aquatic life.

**PERSISTANCE:** This material is believed to be unlikely to persist in the environment.

**BIOACCUMULATION:** This material is believed to be unlikely to bioaccumulate.

**BIODEGRADABILITY:** All components are biodegradable.

**SECTION 13: DISPOSAL CONSIDERATIONS:**

**POTASSIUM HYDROXIDE (KOH) CAS# 1310-58-3:**

Dispose of all waste and contaminated equipment in accordance with all applicable Federal, State and Local health and environmental regulations.

**SECTION 14: TRANSPORT INFORMATION:**

**INTERNATIONAL:** UN Number: UN1760 (Ground only) / UN1760 (Air)

**US TRANSPORTATION REGULATIONS:**

DOT Classification: UN1760, 8 (Corrosive)  
 DOT Proper Shipping Name: Corrosive liquid, N.O.S.  
 (Contains Potassium hydroxide)  
 Packing Group: II

**CANADIAN TRANSPORTATION OF DANGEROUS GOODS:**

N/A

**SECTION 15: REGULATORY INFORMATION:**

**US FEDERAL REGULATIONS:**

**TSCA:** In TSCA (Toxic Substances Control Act)

**SARA 311 and 312 HAZARD CATEGORIES:**

Immediate (Acute): Yes                      Delayed (Chronic): No                      Fire: No  
 Reactivity: Yes                                  Sudden Release of Pressure: No

**SARA SECTION 313 NOTIFICATION:**

This product does contain hazardous chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**CAA 602 OZONE DEPLETING SUBSTANCES (ODS):**

This product neither contains nor is manufactured with an ozone depleting substance subject to the labeling requirements of the Clean Air Act Amendments 1990 and 40 CFR Part 82.

**VOLATILE ORGANIC COMPOUNDS (VOC):** Not Applicable.

**US STATE REGULATIONS:**

**VOLATILE ORGANIC COMPOUNDS (CARB):** Not Applicable.

**CANADIAN REGULATIONS:** N/A

**DSL/NDSL:** N/A

**WHMIS CLASSIFICATION:** N/A

**SECTION 16: SPECIAL INFORMATION:**

The information in this Material Safety Data Sheet should be provided to all who use, handle, transport, or otherwise are exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and persons working with or handling this product. The information presented in this MSDS is premised upon proper handling and anticipated uses, and is for the material without chemical additions/alterations. Additionally, if this Material Safety Data Sheet is more than three years old, please contact this supplier at the phone number above Section 1 to make sure this sheet is current.