

# MATERIAL SAFETY DATA SHEET

**Patriot Chemical**  
P.O. Box 1001  
Wilmington, MA 01887  
Telephone: 800-707-2436

**Date** : 1/2/2008  
**Ref.No.** : 2703  
**Contact:** Marybeth Walker

## 1. Product Identification:

**PRODUCT NAME:** POWER HOUSE PLUS **HMIS CODES:** H F R C  
**Synonyms or** WATER BASED CLEANER 3 0 1  
**Description:**

## 2. Composition/Information on Ingredients:

Chemical Name	CAS#	Wt %.
SODIUM HYDROXIDE 45%	1310-73-2	30% to 40%
POTASSIUM HYDROXIDE 45%	1310-58-3	4% to 9%

Unless listed immediately above, the product contains no hazardous ingredients as listed on the Massachusetts Hazardous Substance List or under §1910.1200 of Title 29 of the Code of Federal Regulations.

## 3. Hazards Identification:

### Emergency Overview

-----  
**Danger! Corrosive!** Causes severe burns to skin, eyes, respiratory tract, and gastrointestinal tract. Material is extremely destructive to all body tissues. May be fatal if swallowed. Harmful if inhaled.  
**INHALATION** of dust or mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or runny nose. Severe pneumonitis may occur.  
**INGESTION** may cause severe burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, fall in blood pressure. Damage may appear days after exposure.  
**SKIN CONTACT** can cause irritation or severe burns and scarring with greater exposures.  
**EYE CONTACT** Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

### Potential Health Effects

-----  
**INHALATION:** Extremely destructive to tissues of the mucous membranes and upper respiratory tract. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. May cause pulmonary edema, a medical emergency. Pulmonary edema may be delayed up to 48 hours.  
**INGESTION:** Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach, leading to death. Can cause sore throat, vomiting, diarrhea.  
**SKIN CONTACT:** Corrosive. Symptoms of redness, pain, and severe burn can occur.  
**EYE CONTACT:** Corrosive. Can cause blurred vision, redness, pain, severe tissue burns and eye damage.  
**CHRONIC EXPOSURE:** No information found.  
**AGGRAVATION OF PRE-EXISTING CONDITIONS:** No information found.

## 4. First Aid Measures:

First Aid Procedures should be pre-planned before using this product.  
**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

# M A T E R I A L   S A F E T Y   D A T A   S H E E T

**INGESTION:** DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**SKIN CONTACT:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

**EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**NOTE TO PHYSICIAN:** Perform endoscopy in all cases of suspected sodium or potassium hydroxide ingestion. In cases of severe esophageal corrosion, the use of therapeutic doses of steroids should be considered. General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes, and fluid intake are also required.

## 5. Fire Fighting Measures:

**FIRE:** Not considered to be a fire hazard.

Flash point: None known.

Boiling Point: Not Established

**FLAMMABLE LIMITS IN AIR:** Not Applicable

**EXPLOSION:** Not considered to be an explosion hazard.

**FIRE EXTINGUISHING MEDIA:** Use any means suitable for extinguishing surrounding fire.

**SPECIAL INFORMATION:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## 6. Accidental Release Measures:

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. Isolate hazard area. Keep unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect material in an appropriate container. Liquids may be absorbed with an inert material (e.g. vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse any vapors, to protect personnel attempting to stop leak and to flush spills away from exposures.

## 7. Handling and Storage:

Keep in an upright, tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Always add the product to water while stirring; never the reverse. Containers of this material may be hazardous when empty since they retain product residues (dust, solids, liquid). Observe all warnings and precautions listed for the product. Do not store with aluminum or magnesium. Do not mix with acids or organic materials.

## 8. Exposure Controls/Personal Protection:

Material Name	PEL (OSHA)	TWA (ACGIH)	TLV (ACGIH)
POTASSIUM HYDROXIDE 45%	2 mg / m <sup>3</sup> (ceiling)	2 mg / m <sup>3</sup> (ceiling)	
SODIUM HYDROXIDE 45%	2 mg / m <sup>3</sup> (ceiling)		

**VENTILATION SYSTEM:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

**PERSONAL RESPIRATORS (NIOSH Approved):** If the product is misted, vaporized or aerosoled and the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator

# MATERIAL SAFETY DATA SHEET

supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**SKIN PROTECTION:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**EYE PROTECTION:** Use chemical splash proof safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and Chemical Properties:

Appearance: Orange clear liquid.

Odor: Dark Red Brown Liquid.

Solubility in Water: Completely soluble in water.

Specific Gravity: 1.23

pH: 13.0 - 13.5 Conc

Volatile (% V.O.C. by volume): 0.00

Melting Point: Not Known

Vapor Density (Air=1): Not Known

Vapor Pressure (mm Hg): Not Known

Evaporation Rate (BuAc=1): As water.

## 10. Stability and Reactivity:

**STABILITY:** Stable under ordinary conditions of use and storage.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Not known.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**INCOMPATIBILITIES:** Avoid mixing with other chemicals unless reactivity is known.

**CONDITIONS TO AVOID:** No information found.

## 11. Toxicological Information:

**SODIUM HYDROXIDE:**

Irritation data: skin, rabbit: 500 mg/24H severe; eye rabbit: 50 ug/24H severe; investigated as a mutagen.

-----\Cancer Lists\-----

---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
Sodium Hydroxide (1310-73-2)	No	No	None

**POTASSIUM HYDROXIDE:** Oral rat LD50: 273 mg/kg; Investigated as a mutagen. Skin Irritation Data (std Draize, 50 mg/24 H): Human, Severe; Rabbit, Severe. Eye Irritation Data(Rabbit, non-std test,1 mg/24 H, rinse): Moderate.

-----\Cancer Lists\-----

---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
Potassium Hydroxide (1310-58-3)	No	No	None
Water (7732-18-5)	No	No	None

# M A T E R I A L   S A F E T Y   D A T A   S H E E T

## 12. Ecological Information:

Environmental Fate: Not established

Environmental Toxicity: Not available

## 13. Disposal Considerations:

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Large amounts should be given to a licensed disposal agency. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local regulations.

## 14. Transport Information:

D. O. T. Classification (Domestic, Land):

NA 1760, COMPOUNDS, CLEANING LIQUID (CONTAINS SODIUM HYDROXIDE & POTASSIUM HYDROXIDE), 8, PG III      ERG 154

## 15. Regulatory Information:

Not Known

## 16. Other Information:

DISCLAIMER:

See the product label for use directions.

The information of this Material Safety Data Sheet reflects the latest information and data that we have on hazards, properties and handling of this product under the recommended conditions of use. Any use of this product or method of application which is not described on the Label or in the Product Data Sheet is the responsibility of the user.

This Material Safety Data Sheet was prepared to comply with the OSHA Hazard Communications Regulation and Massachusetts Right to Know Law.