

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: Power Klean XP Product Use: Machine Warewashing Detergent Manufactured by: Kor-Chem, Inc. 5800 Bucknell Drive Atlanta, GA 30336	Product Identification # (PIF): 02254 Emergency Telephone #: 1-800-255-3924 General Information #: 404-344-9580 Date Prepared: September 15, 2014 Date Revised: August 5, 2015
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SECTION 2. HAZARD(S) IDENTIFICATION

GHS Hazard Codification



Signal Word: DANGER

Hazard Class	Category	Code	Hazard Statement
Skin Corrosion	1B	H314	Causes severe burns and eye damage
Serious Eye Damage	1	H318	Causes serious eye damage
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
Hazardous to the Aquatic Environment, Acute Hazard	3	H402	Harmful to aquatic life

Precautionary	Code	Statement
Prevention	P234 P260 P264 P270 P273 P280	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. 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 P310 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. Immediately call a POISON CENTER or doctor/physician. Absorb spillage to prevent material damage.
Storage	P404 P405	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: Inhaling mists/sprays of material is corrosive to respiratory tract and may cause pulmonary edema (shortness of breath and tightness of chest). Corrosive to digestive tract - Ingestion may cause severe pain, burning, vomiting and diarrhea.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Common Name	CAS #	Concentration Range %
Sodium hydroxide	Caustic soda	1310-73-2	15 – 19

SECTION 4. FIRST AID MEASURES

- **Eyes:** Immediately flush well with water for at least 15 minutes, while holding eyelids open. Remove any contact lenses and continue rinsing. Seek medical attention immediately.
- **Skin:** Wash with soap and water, then flush with water for 15 minutes. Remove contaminated clothing and launder before reuse. If irritation persists, seek medical attention.
Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, have a trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration by way of pocket mask equipped with one-way valve or other proper respiratory device – Do NOT use mouth-to-mouth method if victim inhaled material. Get medical attention immediately. Pulmonary edema symptoms can be delayed up to 48 hours after exposure.
- **Ingestion:** DO NOT INDUCE VOMITING. Rinse mouth. 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: Not flammable

Flash Point: Not flammable

- Extinguishing Media: Use media appropriate for surrounding fire.
- 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: Sodium oxide fumes.
- 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 not sensitive to static discharge.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment (Section 8). Ventilate area. Do not breathe fumes/mists/ vapors/sprays. Avoid release to the environment - Absorb spillage to prevent material damage.

- For Small Spills: 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 to reduce slipping hazard. 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 with adequate ventilation. Do not pre-mix with other chemicals. Do not breathe mists/sprays. Empty containers may contain residue and can be dangerous. Do not eat, drink or smoke in work areas. Wash thoroughly after handling. Avoid release into the environment.
- Storage: Keep away from heat, flame, or sunlight. Keep from freezing. Keep container tightly closed when not in use. Store locked up. Keep only in original container. Protect from physical damage. Store away from strong acids, halogenated compounds, prolonged contact with metals or alloys.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	CAS #	OSHA/PEL	ACGIH/TLV	STEL
Sodium hydroxide	1310-73-2	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 gloves. Normal materials handling clothing and apron.
- Respirator: Use NIOSH approved protection if PEL is exceeded or if mists/sprays are generated.
- 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	Red, clear liquid	Upper/Lower flammability limits	Not determined
Odor	None	Vapor pressure	Not determined
Odor threshold	Not determined	Vapor density (Air = 1)	<1
pH	12 – 14	Specific gravity (water = 1.0)	1.190 g/ml
Melting point	Not determined	Solubility	Complete in water
Freezing point	Not determined	Partition coefficient (n-octanol/water)	Not determined
Boiling point	Not determined	Auto-ignition temperature	Not determined
Flash point	Not flammable	Decomposition temperature	Not determined
Evaporation rate (n-butyl acetate=1)	<1	Viscosity	Not determined
Flammability	Not flammable	%Volatile/Volume	82

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: 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, halogenated compounds, prolonged contact with metals or alloys.
- Hazardous combustion products: Sodium oxide fumes.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity (short and long term):

- Oral (LD50 Rat): Not determined
- Dermal (LD50 Rabbit): 1350 mg/kg
- Inhalation (LC50 Rat): Not determined
- 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).
- **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.
- NTP/IARC/OSHA Carcinogen: No

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Effects:

- 24h LD-50 (fish): 25ppm
- 96h LD-50 (invertebrates): 100 ppm
- 96h EC-50 (algae): Not determined
- **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. 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. Avoid release to the environment - Absorb spillage to prevent material damage.

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., (Sodium 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., (Sodium hydroxide)
- Hazard Class: 8
- Packing Group: II
- Marine Pollutant (IMDG Code): No
- 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	No
Delayed (Chronic) Health	No	Reactive Hazard	Yes

SARA Title 313: This material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels (40 CFR 372).

CERCLA: Sodium hydroxide #1310-73-2 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: Sodium hydroxide (CAS #1310-58-3) - Massachusetts, Minnesota, New Jersey, Pennsylvania, Rhode Island.

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 Prepared: August 5, 2015
- Hazard Ratings (HMIS): Health 3, Flammability 0, Reactivity 1 (Scale 0 – 4). Personal Protection Rating to be supplied by user based on use conditions.
- Product VOC: 0%
- Carefully read all instructions on label before handling this product.
- Keep out of reach of children.
- "FOR INDUSTRIAL USE ONLY"

Abbreviation	Full Name/Explanation
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.