

Supplied By:



4801 W. Vernal Pike
Bloomington, IN 47404
1-800-734-4133

Material Safety Data Sheet

**EMERGENCY PHONE:
1-800-535-5053**

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Section 1: Product Identification

Product Name: LIQUIWARE PLUS
Product Number: K203 AND K204
Product Use: Liquid Alkaline Chlorinated Dishwashing Detergent
DOT Shipping Name: Corrosive Liquids, N.O.S., 8, UN1760, PGII (Sodium Hydroxide)

Section 2: Hazardous Ingredient Information

Hazard Chemical Identity	CAS No.	ACGIH TLV
Sodium Hydroxide	1310-73-2	2 mg/m ³
Sodium Hypochlorite	7681-52-9	N.E.
2-Phosphonobutane-1,2,4-Tricarboxylic Acid	37971-36-1	N.E.

HMS HAZARD RATING: Health 3 Fire 0 Reactivity 1

**This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the emergency planning and community right-to-know act of 1988.

Section 3: Physical Data

Color: Amber **Odor:** Chlorine / Musty **Physical State:** Liquid
Solubility in Water: Complete **Boiling Point:** >212°F / 100°C
Vapor Pressure: Unknown **Specific Gravity:** 1.245
Vapor Density (Air=1): Water Vapor Only **pH:** 14, 0
Evaporation Rate: Unknown **% Volatile by Volume:** 70%

Section 4: Fire and Explosion Hazard Data

Flash Point (Method Used): N.A. **Flammable Limits in Air:** N.A.
Extinguishing Media: Carbon Dioxide, Foam and Water.
Special Fire Fighting Procedures: Use NIOSH/MSHA approved self contained breathing apparatus.
Unusual Fire and Explosion Hazards: Contact with reactive metals can generate explosive hydrogen gas.

Section 5: Reactivity Data

Chemical Stability: Stable
Conditions to Avoid: Materials listed below.
Incompatibility (Materials to avoid): Mixture with acids, organic materials, magnesium, aluminum, zinc, tin, chromium, brass and bronze.
Hazardous Decomposition Products: Contact with carbohydrates can produce carbon monoxide. Contact with aluminum, zinc or tin can produce explosive hydrogen gas.

Section 6: Toxicological Properties

Exposure Limits:	ACGIH	OSHA
Sodium Hydroxide	2mg/m ³ Ceiling	None

Medical Conditions Aggravated by Exposure: None known.
WARNING! Eyes: Major potential hazard. Liquid in the eye can cause severe destruction and blindness. These effects can occur rapidly affecting all parts of the eye. Mist can cause irritation with high concentrations causing destructive burns.
Skin: Major potential hazard. Contact with the skin can cause severe irritation and/or burns characterized by redness, swelling and scab formation. Prolonged skin exposure may cause permanent damage. Solutions may not cause immediate pain or irritation upon skin contact. Prolonged or repeated contact with dilute solutions may cause drying and cracking of skin and possible skin damage.
Ingestion: Ingestion can cause severe burning and pain in mouth, throat, esophagus and stomach. Severe scarring and perforation of the gastrointestinal tract may occur after swallowing. Death can result from ingestion.
Inhalation: Inhalation of solution mist can cause mild irritation at 2mg/m³. More severe burns and tissue damage of the upper respiratory tract can occur at higher concentrations.
Chronic Toxicity: Chronic skin contact may cause dermatitis. This product does not contain any materials listed on the IARC, OSHA, or NPT carcinogen lists.
TSCA (Toxic Substance Control Act): All components of this product are listed on the TSCA Inventory.
Title III Hazard Classifications: Acute=yes, Chronic=no, Fire=no, Reactivity=yes, Pressure=no

Section 7: Preventative & Control Measures

Respiratory Protection: For levels that exceed or are likely to exceed 2 mg/m³ use a NIOSH-approved dust and mist respirator where spray mist occurs. Observe OSHA regulations for respirator use (29 C.F.R. 1910.134)
Ventilation: As necessary with local exhaust ventilation to maintain concentration in air below 2mg/m³ at all times.
Skin Protection: Wear neoprene, PVC, or rubber gloves. Wear protective clothing to prevent skin contact.
Eye Protection: Wear safety glasses or splashproof chemical goggles.
Hygiene: Avoid contact with skin. Do not eat, drink or smoke in work area. Wash hands prior to eating, drinking, or using restroom. Any protective clothing which becomes contaminated should be thoroughly cleaned before reuse.
Other Control Measures: Safety shower and eye wash should be located in work area.
STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: Small amounts of product can be diluted and rinsed down the drain with water. Larger amounts should be contained and recovered with a vacuum truck or pump. Clean up personnel should follow all safety precautions. Neutralize traces of material with dilute inorganic acid such as phosphoric. Flush area with water followed by a liberal covering of sodium bicarbonate.
Waste Disposal: Dispose of in accordance with all local, state and federal regulations.

Section 8: Emergency First Aid Procedures

First Aid Notes to Physician:
Eyes: Wash eyes immediately with large amounts of water (preferably eye wash fountain), lifting the upper and lower eyelids and rotating eyeball. Continue washing for a minimum of 15 minutes. **Get medical attention immediately.**
Skin: Remove contaminated clothing immediately and wash skin thoroughly for a minimum of 15 minutes with large quantities of water (preferably a safety shower). **Get medical attention immediately for irritation or burns.**
Ingestion: If person is conscious, give large quantities of water to dilute product. Do NOT induce vomiting. **It is important to obtain immediate medical treatment.**
Inhalation: Move person to fresh air. If breathing stops, administer artificial respiration. **Get medical attention immediately.**

Section : Storage and Handling Precautions

KEEP FROM FREEZING.
Store in closed, properly labeled containers. DO NOT remove or deface labels.
Store in a cool, dry place. May react with certain metals to form explosive hydrogen gas.
DANGER! Causes severe burns to skin and eyes. When handling, wear rubber gloves and protective equipment. Use of this product should be limited to properly trained individuals.

Section 9: Preparation Information

Prepared By: Regulatory Affairs Department
Phone: 812-336-4817
Date of Preparation: January 2010

The above information is believed to be accurate with respect to the formula used to manufacture this product. As data, standards and regulations change and conditions of use and handling are beyond our control. **NO WARRANTY** expressed or implied is made as to the completeness of continuing of this information.

LiquiWare Plus

Technical Data Sheet

*Liquid
Warewash
Detergent*

Product Description

Liquiware Plus is a balanced warewashing detergent designed for institutional dishwashers. The alkalinity booster in **Liquiware Plus** provides good detergency to emulsify grease and food soils. Special water conditioning and soil suspending agents prevent mineral and soil deposits on the dishware and in the machine. Chlorinating agents remove coffee, tea and food stains. **Liquiware Plus** has proven to be a very effective and economical machine detergent in difficult conditions. NOT recommended for soft metals.

*Heavy
Duty
Formula*

Use Directions

For use in electronic dispensing systems. Use a pail wrench to unscrew inner cap. Insert plastic tube labeled "LiquiWare Plus" into 5 gallon bucket. Product will automatically be dispensed into the dishmachine during the wash cycle. LabTek will adjust the concentration to provide optimum results.

*Chlorinated
For
Stain
Removal*

Areas of Use

Designed to be used in institutional mechanical dishwashers.

Safety Precautions

Caution! Harmful if swallowed. Irritating to eyes. Keep out of reach of children. Read label and MSDS thoroughly for complete list of hazards and safety precautions.

Shipping Classification

Corrosive Liquids, N.O.S., 8, UN1760, PGII (Sodium Hydroxide)

*Water
Conditioner*

Packaging

5 Gallon Pail
4-1 Gallon/Case

Properties

FORM: Amber Liquid
pH (1% SOLUTION): 14
SPECIFIC GRAVITY: 1.245
SOLUBILITY: Complete
PRIMARY HAZARD Corrosive to eyes and skin
COMPOSITION: Alkaline builders, Sodium Hydroxide, Sodium Hypochlorite, water conditioners.