

Supplied By:



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# 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:** LIQUID METAL SAFE  
**Product Number:** MK104  
**Product Use:** Liquid Soft-Metal Safe Dishwashing Detergent  
**DOT Shipping Name:** Corrosive Liquids, N.O.S. (Potassium Hydroxide), 8, UN1760, PGII

## Section 2: Hazardous Ingredient Information

Hazard Chemical Identity	CAS No.	ACGIH/TLV
Potassium Hydroxide	1310-58-3	2 mg/m <sup>3</sup>
Tetrapotassium Pyrophosphate (60%)	7320-34-5	N.A.

\*\*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:** Yellow    **Odor:** Mild    **Physical State:** Liquid  
**Solubility in Water:** Complete    **Boiling Point:** Similar to water  
**Vapor Pressure:** Similar to water    **Specific Gravity:** 1.247%  
**Volatile, By Volume:** None  
**Vapor Density in Air (Air=1):** Similar to water  
**Evaporation Rate:** Similar to water

## Section 4: Fire and Explosion Hazard Data

**Flash Point (Method Used):** None  
**Flammable Limits in Air:** N.A.  
**Extinguishing Media:** N.A.  
**Unusual Fire and Explosion Hazards:** Firefighters should wear self-contained positive breathing apparatus, and avoid skin contact.

## Section 5: Reactivity Data

**Chemical Stability:** Stable  
**Conditions to Avoid:** Mixture with acid or incompatible materials can cause splattering and release of large amounts of heat.  
**Incompatibility (Materials to avoid):** Acids, chlorinated hydrocarbons, chlorine dioxide, phosphorus, potassium persulfate, and tetrahydrofuran.  
**Hazardous Decomposition Products:** None Known  
**Hazardous Polymerization:** Will not occur

## Section 6: Toxicological Properties

Exposure Limits:	ACGIH	OSHA
Potassium Hydroxide	2mg/m <sup>3</sup> Ceiling	None

**Medical Conditions Aggravated by Exposure:** No known medical conditions aggravated by exposure.

### Acute Toxicity:

**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 burns with deep ulceration's. Contact with solution or mist can cause multiple burns with temporary loss of hair at burn site. 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 of the throat can occur after swallowing. Death can result from ingestion.  
**Inhalation:** Inhalation of solution mist can cause mild irritation at 2mg/m<sup>3</sup>. 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.

## Section 7: Preventative & Control Measures

**Respiratory Protection:** For levels that exceed or are likely to exceed 2 mg/m<sup>3</sup> use approved high efficiency particulate filter with full face piece or self-contained breathing apparatus. Follow any applicable respirator use standards and regulations.  
**Ventilation:** As necessary to maintain concentration in air below 2mg/m<sup>3</sup> at all times.  
**Skin Protection:** Wear neoprene, PVC, or rubber gloves.  
**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. Clean up personnel should follow all safety precautions during clean up.  
**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.**  
**Ingestion:** If person is conscious, give large quantities of water to dilute product. Do NOT induce vomiting. **Get medical attention immediately.**  
**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.  
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:** September, 2005

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.

# Liquid Metal Safe

## Technical Data Sheet

Liquid  
Detergent

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### Product Description

**Liquid Metal Safe** contains no chlorine. It is safe for soft metals such as aluminum pots and baking pans. Its mild formulation will not damage plastic trays or genuine china.

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### Use Directions

**Liquid Metal Safe** is made to be dispensed automatically through a dispenser. This equipment will be adjusted by your LabTek service representative to meet your warewashing requirements.

Safe  
for  
Soft  
Metals  
and  
Plastics

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### Areas of Use

For use in institutional kitchens only.

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### Safety Precautions

Danger! May cause severe chemical burns. Eye contact may cause blindness. Skin contact may not cause immediate pain. Immediate water flushing is vital in case of eye contact. Ingestions can cause severe burns and tissue damage. Read label and MSDS for complete list of hazards and safety precautions. Keep out of the reach of children.

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### Shipping Classification

Corrosive Liquid, N.O.S. (Potassium Hydroxide), 8, UN 1719, PG II

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### Packaging

5 Gallon Plastic Pail

Non-  
Chlorinated

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### Properties

**FORM:** Yellow liquid with mild odor  
**SPECIFIC GRAVITY:** About 20%  
**PRIMARY HAZARD:** Major hazard for eyes, skin respiratory system. Mixture with acids or incompatible materials will cause splattering.  
**COMPOSITION:** Potassium Hydroxide  
Tetrapotassium Pyrophosphate