



# Safety Data Sheet

**Issue Date:** 04-02-2014

**Revision Date:** NEW

**Version 1**

## 1: IDENTIFICATION

**Product Identifier:**

**Product Name:** System Cleaner, Liquid

**Other Means of Identification:**

**Part Number:** 4370-08

**Recommended Use of the Chemical and Restrictions on Use:**

**Details of the Author of the Safety Data Sheet:**

**Supplier Address:** NU-CALGON WHOLESALER, INC.  
2008 Altom Court  
St. Louis, MO 63146-4151

**Emergency Telephone Number:**

**Company Phone Number:** (314) 469-7000  
(800) 554-5499

**Emergency Telephone:  
Number (24hr):** CHEMTREC 800-424-9300

## 2: HAZARDS IDENTIFICATION

**Hazard Classification:** Acute toxicity (oral), category 3  
Skin corrosion, category 1B  
Serious eye damage, category 1

**Signal Word:** Danger

**Hazard Statements:** H301: Toxic if swallowed.  
H314: Causes severe skin burns and eye damage.

**Pictograms of Related Hazards:**



**Precautionary Statements:**

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 - Do NOT induce vomiting

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor/physician.

P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P310: Immediately call a POISON CENTER or doctor/physician

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P311: Call a POISON CENTER or doctor/physician

P363: Wash contaminated clothing before reuse

P405 – Store locked up.

**Description of Other Hazards:** Mist causes respiratory tract irritation and burns.

### 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name                | CAS #       | Weight % |
|------------------------------|-------------|----------|
| Tetrapotassium pyrophosphate | 7320-34-5   | 1-10     |
| Potassium hydroxide          | 1310-58-3   | 1-10     |
| Sodium silicate              | 15859-24-2  | 1-10     |
| Amphoteric surfactant        | Proprietary | 1-10     |
| Alkylphenol ethoxylate       | 68412-54-4  | 1-10     |

### 4: FIRST-AID MEASURES

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids to ensure complete rinsing. Remove contact lenses, if present, after 5 minutes of flushing, and then continue flushing. Get medical attention immediately.

**Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing and thoroughly clean shoes before reuse.

**Inhalation:** If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** If swallowed, do NOT induce vomiting. If victim is conscious and alert, rinse out mouth with water and give large quantities of water to drink. Get medical attention immediately. Never give anything by mouth to an unconscious person.

## 5: FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Use extinguishing media appropriate for the surrounding fire.

**Unsuitable Extinguishing Media:** Not available

**Protective Equipment and Precautions for Firefighters:** Firefighters should wear full protective clothing including a self-contained breathing apparatus.

**Specific Hazards Arising from this Chemical:** Contact with some metals can generate flammable hydrogen gas. Toxic gases may be emitted under fire conditions.

**Hazardous Combustion Products:** Thermal decomposition or combustion may produce oxides of potassium, oxides of phosphorus, oxides of carbon, oxides of sodium, and oxides of nitrogen.

## 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Ventilate the spill area. Keep unnecessary and unprotected people away from the spill site. Stop or reduce any leaks if is safe to do so. Notify appropriate government, occupational health and safety, and environmental authorities.

### Methods for Clean-up:

**Small spills:** Soak up spill with an inert absorbent material (e.g. vermiculite, sand, or earth). Place residues in a suitable, covered, properly labeled container. Wash the affected area.

**Large spills:** Contain liquid using an inert absorbent material (e.g. vermiculite, sand, or earth), by digging trenches, or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Contact an approved waste hauler for disposal of contaminated recovered material.

**Disposal:** Dispose of material in compliance with federal, state, and local regulations.

**Environmental Precautions:** Prevent entry into lakes, ponds, streams, waterways, or public

## 7: HANDLING AND STORAGE

### Advice on Safe Handling:

DANGER - CORROSIVE

Avoid contact with skin, eyes, and clothing.

Avoid breathing vapors or mist.

Use with adequate ventilation.

Wash thoroughly after handling.

Do not take internally.

Keep containers closed when not in use.

Ensure that containers are properly labeled.  
 Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid).  
 Observe all warnings and precautions listed for this product.  
 Have emergency equipment (for fires, spills, leaks, etc.) readily available.

### Storage Conditions:

Store in a cool, dry, well-ventilated area away from incompatible materials.  
 Protect against the physical damage of containers.

## 8: EXPOSURE CONTROL / PERSONAL PROTECTION

| Chemical Name                | NIOSH            | OSHA PEL           | ACGIH TLV          |
|------------------------------|------------------|--------------------|--------------------|
| Tetrapotassium pyrophosphate | None established | None established   | None established   |
| Potassium hydroxide          | None established | 2mg/m <sup>3</sup> | 2mg/m <sup>3</sup> |
| Sodium silicate              | None established | None established   | None established   |
| Amphoteric surfactant        | None established | None established   | None established   |
| Alkylphenol ethoxylate       | None established | None established   | None established   |

**Eye/Face Protection:** Chemical splash goggles and face shield.

**Skin and Body Protection:** Chemical resistant gloves and impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory Protection:** If airborne concentrations exceed published exposure limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements (29 CFR 1910.134).



**Engineering Controls:** Use local and/or general exhaust ventilation to maintain airborne concentrations below irritating levels or airborne exposure limits, whichever is lower. Local exhaust is generally preferred because it can control the emission of the contaminant at its source, thus preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices, the most recent edition", for details.

**General Hygiene Considerations:** Use good industrial hygiene practices in handling this material. When using, do not eat or drink. Wash hands before breaks and immediately after handling the product. An eye wash station and safety shower should be accessible in the immediate area of use. Protective equipment should be cleaned thoroughly after each use.

## 9: PHYSICAL AND CHEMICAL PROPERTIES

**pH:** >13.0

**Specific Gravity:** 1.170-1.250 g/mL

**Flash Point:** Not available

**Solubility In Water:** Not available

**Boiling Point:** Not available

**Freezing Point:** Not available

**Vapor Pressure:** Not available

**Vapor Density:** Not available

**Appearance and Odor:** Clear colorless to pale yellow solution with mild odor

## 10: STABILITY AND REACTIVITY

**Chemical Stability:** Stable

**Hazardous Polymerization:** Will not occur.

**Incompatibilities:** Strong oxidizers and acids. This product will react violently with acids.

**Reactive Conditions to Avoid:** Temperature extremes and incompatibles

**Hazardous Decomposition Products:** Thermal decomposition or combustion may produce oxides of potassium, oxides of phosphorus, oxides of carbon, oxides of sodium, and oxides of nitrogen.

## 11: TOXICOLOGICAL INFORMATION

**Likely Routes Of Exposure:** Eye contact, skin contact, ingestion, and inhalation of product vapors or mists

**Acute Toxicity:**

| Test Material                                | Oral LD50 (rat) | Dermal LD50 (rabbit) | Inhalation LC50 (rat) |
|--|-----------------|----------------------|-----------------------|
| Tetrapotassium pyrophosphate                 | 2,440 mg/Kg     | >2,000 mg/Kg         | Not available         |
| Potassium hydroxide                          | 273 mg/Kg       | 1,600 mg/Kg          | Not available         |
| Sodium silicate                              | 1,153 mg/Kg     | Not available        | 4,640 mg/Kg           |
| Amphoteric surfactant, 39% with <5% methanol | >5 mL/Kg        | Not available        | 64,000 ppm/1hr        |
| Alkylphenol ethoxylate                       | 510 mg/Kg       | Not available        | Not available         |

**Acute Symptoms and Effects:**

**Eye:** Contact with the eye causes severe irritation and burns. Tearing, redness, pain, swelling, and impaired vision may occur. Greater exposures may possibly result in permanent damage.

**Skin:** Contact with skin causes severe skin irritation and burns. Soreness, redness, and destruction of skin may result. There may be a delay between the time of exposure and when the sense of irritation begins.

**Ingestion:** Ingestion of this product causes irritation and burns of the mouth, throat, esophagus, stomach, and intestine. Perforation of the esophagus, stomach, and/or intestine may occur. Abdominal pain, nausea, vomiting, diarrhea, and general gastrointestinal upset can be expected. Blood chemistry effects (hypocalcemia and hyperkalemia) may occur if a large amount of the product component, TKPP, is ingested.

**Inhalation:** Inhalation of product mist causes respiratory tract irritation and burns. Symptoms may include a burning sensation, coughing, wheezing, laryngitis, shortage of breath, headache, nausea, and vomiting. High concentrations may cause lung damage.

**Chronic:** No applicable information was found concerning any potential health effects resulting from subchronic or chronic exposure to the product.

**Reproductive effects:** Not established

**Teratogenicity:** Not established

**Mutagenicity:** Not established

**Embryotoxicity:** Not established

**Sensitization to Product:** Not established

**Synergistic Products:** Not established

**Carcinogenicity:** Not established

The toxicological properties of this material have not been fully investigated.

**12: ECOLOGICAL INFORMATION****Aquatic Toxicity:**

Components of this product have been identified as having potential environmental concerns.

**Acute Toxicity Data:**

| Test Material                                   | Aquatic Toxicity Data  |
|---|--|
| Tetrapotassium pyrophosphate                    | 48 hr LC50 (Daphnia magna): >100 mg/L<br>96 hr LC50 (Rainbow trout): >100 mg/L   |
| Potassium hydroxide                             | 48 hr EC50 (Water flea): 60 mg/L<br>96 hr LC50 (Fathead minnow): 179 mg/L<br>24 hr LD50 (Bluegill sunfish): 56 mg/L<br>24 hr LD50 (Rainbow trout): 50 mg/L |
| Sodium metasilicate                             | 96 hr LC50 (Daphnia magna): 496 mg/L<br>96 hr LC50 (Mosquito fish): 530 mg/L   |
| Amphoteric surfactant,<br>39% with <5% methanol | 48 hr EC50 (Daphnia magna): >100 mg/L  |
| Alkylphenol ethoxylate<br>(similar product)     | 48 hr LC50 (Daphnia): 21.4 mg/L<br>96 hr LC50 (Daphnia): 6.6 mg/L<br>96 hr LC50 (Fathead minnow): 7.7, 4.8, and 6.6 mg/L                                   |

**Persistence and Degradability:**

No data available

**Bioaccumulative Potential:**

No data available

**Mobility in Soil:**

No data available

**Other Adverse Effects:**

No data available

**13: DISPOSAL INFORMATION****Disposal:** Dispose of in accordance with local, state, and federal regulations.**14: TRANSPORT INFORMATION**

Please see current shipping paper for most up-to-date shipping information, including exemptions and special circumstances.

**US Department of Transportation (DOT):**

UN Number: UN 1760

Proper Shipping Name: Corrosive Liquid, n.o.s.  
(Potassium hydroxide)

Primary Hazard Class/Division: 8

Packing Group: III

Label: Corrosive



**Canada (TDG):**

UN Number: UN 1760  
 Proper Shipping Name: Corrosive Liquid, n.o.s.  
 (Potassium hydroxide)  
 Primary Hazard Class/Division: 8  
 Packing Group: III  
 Label: Corrosive



**International Maritime Dangerous Goods Code (IMDG):**

UN Number: UN 1760  
 Proper Shipping Name: Corrosive Liquid, n.o.s.  
 (Potassium hydroxide)  
 Primary Hazard Class/Division: 8  
 Packing Group: III  
 Label: Corrosive



**15: REGULATORY INFORMATION**

**US Federal Regulations:**

**OSHA Hazard Communication Status:** Hazardous

**TSCA:** The ingredients of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

**CERCLA: EPA Hazardous Substances (40 CFR 302):**

| <u>Chemical Name</u> | <u>CERCLA Reportable Quantity (RQ)</u> |
|----------------------|--|
| Potassium hydroxide  | 1,000 lb                               |
| Product              | 14,815 lb                              |

(Notify the EPA of spills exceeding this amount.)

**SARA TITLE III (Sections 302, 311, 312, and 313):**

**Section 302 Extremely Hazardous Substances (40 CFR 355):**

| <u>Chemical Name</u> | <u>CAS#</u> | <u>RQ</u> | <u>TPQ</u> |
|----------------------|-------------|-----------|------------|
| None                 |             |           |            |

**Section 311 and 312 Health and Physical Hazards:**

| <u>Immediate</u> | <u>Delayed</u> | <u>Fire</u> | <u>Pressure</u> | <u>Reactivity</u> |
|------------------|----------------|-------------|-----------------|-------------------|
| yes              | yes            | no          | no              | No                |

**Section 313 Toxic Chemicals (40 CFR 372):**

| <u>Chemical Name</u> | <u>CAS Number</u> | <u>Percent by Weight</u> |
|----------------------|-------------------|--------------------------|
| None                 |                   |                          |

**US State Regulations:**

California Proposition 65: This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**International Inventories:** No data

**16: OTHER INFORMATION****Other Classifications:**

**HMIS Ratings:** Health = 3 Flammability = 0 Reactivity = 0

**NFPA Ratings:** Health = 3 Flammability = 0 Reactivity = 0

Hazard Rating Scale: 0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe

**WHMIS (Canada):**

Class E: Corrosive Material



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While the information and recommendations set forth herein are believed to be accurate as of the date thereof, NU-CALGON WHOLESALER, INC MAKES NO WARRANTY WITH RESPECT HERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.