

Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **CS-424 Low Foam Alkaline Detergent**

Manufacturer:

Issue Date: February 2015

Chemical Systems

6429 West Jones Avenue

P.O. Box 810

Zellwood, FL 32798

Phone Number: 407.886.2329



24 Hour Emergency Number CHEMTREC: 800.424.9300

2. HAZARDS IDENTIFICATION

GHS Classification: SKIN CORROSION / IRRITATION – Category 1
SERIOUS EYE DAMAGE / EYE IRRITATION – Category 1

Signal Word: Danger

Pictograms:



Hazard Statements: Causes severe skin burns and eye damage.
May be corrosive to metals.

Precautionary Statements:

Prevention: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep only in original container. Wash hands thoroughly after handling.

Response: Absorb spillage to prevent material damage.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician.
IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician.
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 physician.

Storage: Store in corrosive resistant container with a resistant inner liner.

Disposal: See section 13 for waste disposal information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS Number/Name

1310-58-3

Potassium Hydroxide (KOH)

Percentage

10 – 25%

4. FIRST AID MEASURES

- Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- Skin Contact:** Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.
- Ingestion:** Get medical attention immediately. Rinse mouth. Do not induce vomiting.
- Note to Physician:** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. FIRE FIGHTING MEASURES

- Flash Point:** Non-flammable
- Method:** Non-flammable
- Autoignition Temperature:** Non-flammable
- Flammable Limits in Air, by Volume:** **Upper:** Non-flammable
Lower: Non-flammable
- Extinguishing Media:** Non-flammable/Non-combustible Use water spray to keep fire-exposed containers cool.
- Fire Fighting Procedures:** Use water to cool containers, but avoid getting water into containers. Wear NIOSH/MSHA approved positive-pressure self-contained breathing apparatus and full protective clothing.
- Fire and Explosion Hazard:** Direct contact with water can cause a violent exothermic reaction.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Evacuate unnecessary personnel.

Follow protective measures provided under Personal Protection in Section 8.

Environmental Precautions

According to CERCLA regulations, environmental releases that exceed the RQ must be reported to the National Response Center at 1.800.424.8802. State and local response centers may also need to be contacted. Contain liquids and prevent discharges to streams or sewers. Large leaks may require environmental consideration and possible evacuation. Do not apply water to the leak.

This product may react strongly with acids and water.

NEVER FLUSH TO SEWER.

Methods for Cleaning Up

Dry material can be shoveled up. Liquid material can be removed with a vacuum truck. Neutralize remaining traces with any dilute inorganic acid. Flush spill area with water followed by a liberal covering of sodium carbonate. All clean-up material should be removed for proper treatment or disposal. Affected soils should be removed and placed in approved containers.

7. HANDLING AND STORAGE

Handling

Avoid breathing the mist or vapors. Do not get in eyes, on skin, or on clothing. Wash contaminated clothing before reuse. Do not take internally. Wear personal protective equipment as described in Exposure Controls/Personal Protection (Section 8) of the SDS. Wash thoroughly after handling; exposure can cause burns, which are not immediately painful or visible.

Avoid contact with acids to avoid possible violent reaction.

Containers, even those that have been emptied, will retain product residue and vapor and should be handled as if they were full.

If product is added too rapidly, or without stirring, and becomes concentrated at the bottom of a mixing vessel, excessive heat may be generated, resulting in DANGEROUS boiling and spattering.

Special Mixing and Handling Instructions

Considerable heat is generated when product is mixed with water. Therefore, when making solutions, ALWAYS wear ALL protective clothing described in Section 8 of this SDS. NEVER add water to product. ALWAYS add product, with constant stirring, slowly to surface lukewarm (80°F to 100°F) water, to assure product is being completely mixed as it is added. If product is added too rapidly, or without stirring, and becomes concentrated at the bottom of a mixing vessel, excessive heat may be generated, resulting in DANGEROUS boiling and spattering. Avoid contact with aluminum, tin, zinc, and alloys containing these metals. Avoid contact with leather, wool, acids, organic halogen compounds, and organic nitro compounds. Product can react VIOLENTLY with acids, aldehydes, and many other organic chemicals.

Before adding product, ALWAYS empty and clean containers of all residues to avoid a possible VIOLENT reaction between product and unknown residue. Returnable containers should be shipped in accordance with supplier's recommendations. Return shipments should comply with all federal, state, and DOT regulations. All residues should be removed from containers prior to disposal.

Storage

Keep container tightly closed and properly labeled.

Dikes should hold 110% of storage volume.

Aluminum is not an acceptable material of construction with this product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CAS Number/Name

1310-58-3 Potassium Hydroxide (KOH)

Exposure Limits

PEL: 2 mg/m³

TLV: 2 mg/m³

Engineering Controls

No special ventilation required under normal use.

Where engineering controls are not feasible use adequate local exhaust ventilation wherever mist, spray, or vapor may be generated.

Personal Protection

Respiratory:

Respiratory protection is not required under normal use.

If needed, wear an approved NIOSH/MSHA respirator.

Eye/Face:

Wear chemical safety goggles. (ANSI Z87.1)

When appropriate, use a face shield to protect against splashing.

Skin:

Wear chemical resistant gloves such as rubber, neoprene, or vinyl.

Wash contaminated clothing and dry before reuse.

Whenever there is a possibility of splash or contact, wear chemical resistant clothing and boots.

Discard shoes that cannot be decontaminated.

Other:

Emergency shower and eyewash facility should be in close proximity. (ANSI Z358.1)

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Pale amber
Odor	No distinct odor
Boiling Point	212°F
Melting Point	ND
Specific Gravity (Water = 1)	1.217
Solubility in Water	Completely soluble
Vapor Pressure (Air = 1)	1
Vapor Density (Air = 1)	1
Evaporation Rate (Butyl acetate = 1)	1

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable
Reacts with:	Air, water, and other acids
Hazardous Polymerization:	Will not occur
Comments:	Product is corrosive to tin, aluminum, zinc, and alloys containing these metals and will react with these metals in powder form. Avoid contact with leather, wool, acids, organic halogen compounds, or organic nitro compounds. See Handling and Storage in Section 7. Avoid direct contact with water.
Hazardous Decomposition Products:	None

11. TOXICOLOGICAL INFORMATION

May cause burns to the eyes, skin, and mucous membrane. May cause permanent eye damage. Inhalation of mist or spray can produce burns of the respiratory tract. Can react violently with water, acids, and other substances.

Potential Health Effects

Routes of entry:	Inhalation, Ingestion, Skin Contact
Target Organs:	Eyes, skin, respiratory tract, and gastrointestinal tract
Irritancy:	Liquid, vapor, or mist may be irritating to eyes, skin, and respiratory tract.
Sensitizing Capability:	None known
Reproductive Effects:	None known
Cancer Information:	None known

Short Term Exposure (Acute)

Inhalation:	Exposure to vapor, mist, or liquid can produce burns of the respiratory tract. Excessive exposures could result in chemical pneumonia.
Eyes:	Contact can cause tissue damage including burns and possibly blindness.
Skin:	Contact can cause severe burns and tissue destruction. Effects may be delayed.
Ingestion:	Corrosive. Severe burns and complete tissue perforation of mucous membranes of mouth, throat, and stomach.

Repeated Exposure (Chronic)

None known

Synergistic Materials

None known

Medical Conditions Aggravated by Exposure

None known

12. ECOLOGICAL INFORMATION

Keep out of sewers, drainage areas, and waterways. Report spills and releases, as applicable, under federal and state guidelines.

13. DISPOSAL INFORMATION

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state, and local health and environmental regulations.

14. TRANSPORT INFORMATION

DOT Identification Number:	UN 3266
DOT Proper Shipping Name:	Corrosive liquid, basic, inorganic, n.o.s (Potassium Hydroxide)
DOT Hazard Class:	8 (corrosive)
DOT Packaging Group:	II
DOT Hazardous Substance:	RQ 1,000 Lbs. (Potassium Hydroxide)
DOT Marine Pollutant(s):	Not applicable
Additional Description Requirement:	Not applicable
ERG Number:	154

15. REGULATORY INFORMATION

SARA Title III

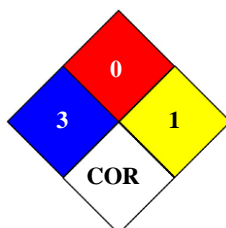
To aid our customers in complying with regulatory requirements, the following chemicals fall under SARA Title III Hazard categories as listed in 40.CFR.370. Please consult these regulations for details.

Chemical Name
Potassium Hydroxide


CAS Number
1310-58-3

16. OTHER INFORMATION

3	Health
0	Flammability
1	Physical Hazard
D	Protective Equipment



For additional non-emergency health, safety, or environmental information, contact:

 **Chemical Systems**
6429 West Jones Avenue
P.O. Box 810
Zellwood, FL 32798
Phone Number: 407.886.2329

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