

SAFETY DATA SHEET

GEL-FOAM ALK NO. 209

Product ID: FP0209

Revised: 07-16-2021

Replaces: 11-09-2017

1. IDENTIFICATION

Product Identifier: GEL-FOAM ALK NO. 209
Other Identifiers: R22439A/R34436
CAS Number: MIXTURE
Recommended Use: Alkaline gel-foam for use in plant cleaning applications and charred soil removal.
Restrictions on Use: No data available.

Hydrite Chemical Co.
300 N. Patrick Blvd.
Brookfield, WI 53008-0948
(262) 792-1450

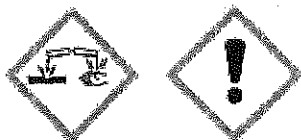
EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency #: (414) 277-1311
CHEMTREC Emergency #: (800) 424-9300

2. HAZARD(S) IDENTIFICATION

GHS Classification(s): Substance or mixture corrosive to metals Category 1
Skin Corrosion/Irritation Category 1B
Serious Eye Damage/Eye Irritation Category 1
Acute Toxicity - Oral Category 4

GHS Label Elements:

GHS Hazard Symbols:



Signal Word: Danger

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

Precautionary Statements:

Prevention: Keep only in original container.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
Specific treatment (see First Aid on SDS or on this label).
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.

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

Disposal: Dispose of in accordance with local, regional and international regulations.

Hazards Not Otherwise Classified: May react with various food sugars to form carbon monoxide.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Mixtures:

<u>Chemical or Common Name/Synonyms</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Potassium Hydroxide	1310-58-3	< 10 %
Proprietary Potassium Salts	68584-27-0	< 10 %
Proprietary Surfactant	3332-27-2	< 10%

Note: Any chemical identity and/or exact percentage not expressly stated is being withheld as a trade secret or is due to batch variation.

4. FIRST-AID MEASURES

Description of Necessary Measures:

Eye Contact: If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Washing eyes within several seconds is essential to achieve maximum effectiveness. Remove contact lens if easy to do.

Skin Contact: If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Wash with soap and water. If skin feels slippery, caustic may still be present in sufficient quantities to cause rash or burn. Continue washing skin until slick feeling is gone. Discard footwear which cannot be decontaminated. Discard contaminated leather articles such as shoes and belt.

Inhalation: If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

Ingestion: If swallowed: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Most Important Symptoms/Effects, Acute and Delayed:

Eye Contact: CORROSIVE-Causes severe irritation and burns. May cause: corneal damage, impaired vision, eye damage, permanent eye damage, blindness.

Skin Contact: CORROSIVE-Causes severe irritation and burns. Contact may cause: redness, swelling, dermatitis (inflammation of the skin), scab formation, ulceration, permanent skin damage. Effects from chronic skin exposure would be similar to those from single exposure and may include effects secondary to tissue destruction.

Skin Absorption: Material can penetrate to deeper layers of skin and corrosion will continue until removed. The severity of injury depends on the concentration and duration of exposure.

Inhalation: CORROSIVE-Causes severe irritation and burns. May irritate or damage: nose, mouth, throat, lungs. Vapors or mists may damage: respiratory tract. May cause: shortness of breath, wheezing, coughing, sneezing, choking, chest pain, ulceration and perforation of the nasal septum, impaired lung function, pulmonary edema, pneumonitis, death.

Ingestion: CORROSIVE-Causes severe irritation and burns. May cause damage to the: mouth, throat, stomach, gastrointestinal tract. May cause: nausea, vomiting, diarrhea, vomiting (bloody), abdominal pain, bleeding, ulcerations, severe gastrointestinal damage, perforation of the intestinal tract, death. Blood loss through damaged tissue can lead to low blood pressure and shock. Effects from chronic exposure would be similar to those from single exposure and may include effects secondary to tissue destruction. Aspiration into the lungs may cause chemical pneumonia and lung damage.

Indication of Immediate Medical Attention and Special Treatment Needed: Probable mucosal damage may contraindicate the use of gastric lavage. The absence of visible signs or symptoms of burns does not reliably exclude the presence of actual tissue damage.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Not combustible. For fires in area use appropriate media. For example: Dry chemical. Water spray. Foam.

Specific Hazards Arising from the Chemical:

Fire and Explosion Hazards: Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. Product generates heat upon addition of water, with possible spattering. Toxic fumes. Corrosive fumes. Fire or intense heat may cause violent rupture of packages.

Hazardous Combustion Products: Toxic and/or hazardous gases.

Special Protective Equipment and Precautions for Fire-Fighters: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers. Move containers from fire area if possible without hazard. Water spray may be useful in minimizing or dispersing vapors.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, Emergency Procedures: CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit.

Methods and Materials for Containment and Clean Up: Contain spills immediately with inert materials (e.g., sand, earth). Place in non-leaking containers for immediate disposal. Neutralize remaining residue with dilute Hydrochloric Acid solution and dispose of properly. CAUTION: This product may react violently with acids and water. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. When mixing, slowly add to water to minimize heat generation and spattering. Do not add large quantities of water, excessive heat formation will cause boiling and spattering.

Conditions for Safe Storage, Including any Incompatibilities: CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Do not store in aluminum container or use aluminum fittings or transfer lines. Highly corrosive to most metals with evolution of hydrogen gas. Never enter a pit or tank without following safety procedures-never alone, always with a lifeline and positive pressure supplied air. Contact of caustic potash cleaning solutions with food and beverage products (in enclosed vessels or spaces) can produce lethal concentrations of carbon monoxide gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
No components found.	

ACGIH Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Potassium Hydroxide	2 mg/m3 Ceiling

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Engineering Controls: General room ventilation is required. Use local exhaust to control vapors, mists, or dusts. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly. NOTE: Where carbon monoxide may be generated, special ventilation may be required.

Individual Protection Measures:

Eye/Face Protection: Wear chemical safety goggles and a full face shield while handling this product. Wear a full-face respirator, if needed.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant. Rubber.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. If exposure limits are exceeded, wear: NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station. Safety shower. Full chemical suit. Rubber apron. Rubber boots. Protective clothing.

General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Color: Clear. Colorless to faint yellow.

Odor: Mild solvent odor.

Odor Threshold: N.D.

pH: 13 (as is)

Freezing Point (deg. F): N.D.

Melting Point (deg. F): N.D.

Initial Boiling Point or Boiling Range: N.A.

Flash Point: N.A.

Flash Point Method: N.A.

Evaporation Rate (nBuAc = 1): N.D.

Flammability (solid, gas): N.D.

Lower Explosion Limit: N.A.

Upper Explosion Limit: N.A.

Vapor Pressure (mm Hg): N.D.

Vapor Density (air=1): N.D.

Specific Gravity or Relative Density: 1.0688 @ 25 Deg. C

Solubility in Water: Soluble

Partition Coefficient (n-octanol/water): N.D.

Autoignition Temperature: No Data

Decomposition Temperature: N.D.

Viscosity: N.D.

% Volatile (wt%): N.D.

VOC (wt%): N.D.

VOC (lbs/gal): N.D.

Fire Point: N.D.

10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions. Produces Chloroacetylene with chlorinated alkenes and heat.

Conditions to Avoid: Contact with water may cause violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product. Contact with acid or incompatible materials may cause a violent reaction with evolution of heat. Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. Corrosive to steels at elevated temperatures. Contact of caustic potash cleaning solutions with food and beverage products (in enclosed vessels or spaces) can produce lethal concentrations of carbon monoxide gas.

Incompatible Materials: Acids. Acrolein. Acrylonitrile. Chlorinated hydrocarbons. Chlorine dioxide. Maleic anhydride. Nitroethane. Nitroparaffins. 2-Nitrophenol. Nitropropane. Phosphorus. Potassium persulfate. Tetrahydrofuran. Organic nitro compounds. Explosives. Organic peroxides. Halogenated compounds. Chlorinated alkenes. Carbohydrates. Metals such as aluminum, zinc, tin, etc. Brass. Bronze. Oxidizing agents. Flammable liquids. Copper. Lead. Other alkali sensitive metals or alloys. Acetaldehyde. Can attack some forms of plastics. Sodium borohydride. Food sugars. Deadly carbon monoxide gas can form in enclosed or poorly ventilated areas or tanks when alkaline products contact food, beverage, or dairy products. Do not enter such areas until they have been well ventilated and carbon monoxide and oxygen levels have been determined to be within OSHA acceptable limits. If carbon monoxide and oxygen levels cannot be measured, wear NIOSH-approved, self-contained breathing apparatus. Nitrous acid and other nitrosating agents.

Hazardous Decomposition Products: Potassium dioxide. May react with certain metals to produce flammable hydrogen gas. Carbon dioxide. Carbon monoxide. Nitrogen oxides. Ammonia. Low molecular weight hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Eyes. Ingestion. Inhalation. Skin.

Symptoms/Effects: Acute, Delayed and Chronic:

Eye Contact: CORROSIVE-Causes severe irritation and burns. May cause: corneal damage. impaired vision. eye damage. permanent eye damage. blindness.

Skin Contact: CORROSIVE-Causes severe irritation and burns. Contact may cause: redness. swelling. dermatitis (inflammation of the skin). scab formation. ulceration. permanent skin damage. Effects from chronic skin exposure would be similar to those from single exposure and may include effects secondary to tissue destruction.

Skin Absorption: Material can penetrate to deeper layers of skin and corrosion will continue until removed. The severity of injury depends on the concentration and duration of exposure.

Inhalation: CORROSIVE-Causes severe irritation and burns. May irritate or damage: nose. mouth. throat. lungs. Vapors or mists may damage: respiratory tract. May cause: shortness of breath. wheezing. coughing. sneezing. choking. chest pain. ulceration and perforation of the nasal septum. impaired lung function. pulmonary edema. pneumonitis. death.

Ingestion: CORROSIVE-Causes severe irritation and burns. May cause damage to the: mouth. throat. stomach. gastrointestinal tract. May cause: nausea. vomiting. diarrhea. vomiting (bloody). abdominal pain. bleeding. ulcerations. severe gastrointestinal damage. perforation of the intestinal tract. death. Blood loss through damaged tissue can lead to low blood pressure and shock. Effects from chronic exposure would be similar to those from single exposure and may include effects secondary to tissue destruction. Aspiration into the lungs may cause chemical pneumonia and lung damage.

Numerical Measures of Toxicity:

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Potassium Hydroxide	Rat: 214 mg/kg	No Data	No Data

Acute Toxicity Estimate (ATE):

Oral: 1002 mg/kg

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Cancer Information:

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Medical Conditions Aggravated by Exposure to Product: Asthma. Respiratory system disorders. Eye disorders. Cardiovascular disorders.

Other: This material will affect all tissues with which it comes into contact. The severity of the tissue damage is a function of concentration, the length of tissue contact time, and local tissue conditions. After exposure, there may be a time delay before irritation and other effects occur.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: D002

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Reuse, recycle, or reprocess if possible. Do NOT dump into any sewers, on the ground, or into any body of water. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Identification Number: UN1814
Proper Shipping Name: POTASSIUM HYDROXIDE, SOLUTION
Hazard Class: 8
Packing Group: II
Label Required: CORROSIVE
Reportable Quantity (RQ): 1000# (Potassium Hydroxide)

15. REGULATORY INFORMATION

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category Hazards: Please see Section 2 of this SDS.

Regulated Components:	CAS	CERCLA	SARA	SARA	U.S.	WI	Prop
Component	Number	RQ	EHS	313	HAP	HAP	65
Potassium Hydroxide	1310-58-3	Yes	No	No	No	Yes	No

***Prop 65 - May Contain the Following Trace Components:**

This product may contain a detectable level of (a) chemical(s) subject to California's Proposition 65.

16. OTHER INFORMATION

Hazard Rating System

Health: 3*
Flammability: 0
Reactivity: 1

* = Chronic Health Hazard

NFPA Rating System

Health: 3

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Flammability: 0
Reactivity: 1
Special Hazard: None

SDS Abbreviations

N.A. = Not Applicable

N.D. = Not Determined

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

C = Ceiling Limit

N.E./Not Estab. = Not Established

SDS Prepared by: JAK

Reason for Revision: Changes in section 9.

Revised: 07-16-2021

Replaces: 11-09-2017

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.