



1. IDENTIFICATION

Product Name LIQUID ALKALI

Product Code

Recommended use and restrictions

Intended use Laundry additive

COMPANY IDENTIFICATION

A-1 Products

1235 E. Kennestone Cir.

Marietta, GA 30066

Phone (770) 428-5545

Toll-Free (800) 969-7659

2020 Avenue F. Ensley

Birmingham, AL 35218

(205) 787-1403

EMERGENCY TELEPHONE NUMBER

INFOTRAC (800) 535-5053

2. HAZARDS IDENTIFICATION

Hazard Classification

Corrosive to Metals	Category 1
Serious Eye Damage	Category 1
Skin Corrosion	Category 1B
STOST - Single Exposure	Category 3
Aquatic Environment	Category 3
Toxicity (Acute)	

Hazard Pictograms



Signal Word

DANGER!

Hazard Statements

H290: May be corrosive to metals

H314: Causes severe skin burns and eye damage

H335: May cause respiratory irritation

Precautionary Statements

P260: Do not breathe dust/fumes/gas/mist/vapors/spray.

P264: Wash skin thoroughly after handling

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

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P301+312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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



P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P405: Store locked up.

P406: Store in a corrosive resistant and non-aluminum container with a resistant inner liner. (Note: flammable hydrogen gas may be generated if aluminum container and/or aluminum fittings are used.)

P501: Dispose of contents/container to an approved waste disposal facility in accordance with local/regional/national/international regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Nature Metal alkoxide

Hazardous Ingredients and Impurities

Chemical Name	CAS#	Percentage
Sodium hydroxide	1310-73-2	50%

4. FIRST AID MEASURES

Description of first-aid measures

General Advice

- First Aid responders should pay attention to self-protection and use the recommended protective clothing. If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Show this material safety data sheet to the doctor in attendance.

In case of inhalation

- Move affected individual to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration; if by mouth-to-mouth use rescuer protection (pocket mask, etc.). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician if necessary.

In case of skin contact

- In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

In case of eye contact

- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- Seek medical advice

In case of ingestion

- If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms and effects, both acute and delayed

- Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.
- Skin contact may aggravate an existing skin disease.

Notes to physician

- All treatments should be based on observed signs and symptoms of distress in the patient.
- Treat symptomatically.



- There is no antidote.

5. FIREFIGHTING MEASURES

Flash Point > 201°F (Pensky Marten Closed Cup)

Autoignition Temperature No data available

Flammability/Explosive limit No data available

Extinguishing media

Suitable extinguishing media

- Water fog or spray
- Dry chemical fire extinguishers
- Foam
- Carbon dioxide CO₂

Unsuitable extinguishing media

- None known

Special hazards arising from the substance or mixture

Specific hazards during fire fighting

- Hazardous decomposition products may form while on fire

Hazardous combustion products

- Oxides of sodium

Advice for fire fighters

Special protective for fire fighters

- Wear a positive-pressure self-contained breathing apparatus (SCBA) and full protective clothing

Firefighting methods

- Do not use a direct water stream as it may spread fire.
- Isolate fire and deny unnecessary entry. Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Isolate area and deny unnecessary entry
- Wear suitable protective equipment.
- Refer to Section 8 "Exposure controls/ personal protection"
- Ventilate area of leak or spill

Environmental precautions

- Prevent spill material from entering soil, ditches, waterway or groundwater
- Spills may be reportable to the National Response Center and/or to state and local agencies

Methods and materials for containment and cleaning up

- Absorb material with sand, dirt, diatomaceous earth, vermiculite, etc...
- Shovel or sweep up material
- Place in a container for disposal according to local, state, or federal regulations



7. HANDLING AND STORAGE

Precautions for safe handling

- Wear personal protective equipment and observe good industrial hygiene practices.

Conditions for safe storage, including incompatibilities

- Store in the original container.
- Keep the container tightly closed when not in use.
- Keep away from open flames, hot surfaces, and ignition sources
- Keep away from any incompatible materials

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Due to variations in safety procedures, work environments, and handling practices, these recommendations should be viewed as general guidance. Most equipment manufactures can assist with the use and maintenance of worker protection equipment.

Control parameters

Component	Regulation	Type of Listing	Value
Sodium hydroxide	OSHA	TWA	2 mg/m3
	ACGIH	TWA	2 mg/m3

Exposure controls

Engineering measures

- Use engineering controls to keep airborne levels below exposure limits to minimize employee exposures.
- Effective exhaust ventilation system
- Eye wash facilities and emergency shower should be available when handling this product

Individual protection measures

- Eye/face protection: Safety glasses with side shields
- Skin/hand protection: Wear suitable protective gloves, clothing, and footwear.
- Respiratory protection: Wear suitable respiratory equipment in cases of insufficient ventilation. Select NIOSH.MSHA approved equipment in accordance to industrial recommendations or regulatory standards.

Hygiene measures

- Practice good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, smoking, applying cosmetics, or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state

Liquid

Form

Liquid

Color

Colorless

Odor

None

Odor Threshold

No data available

pH

14 @ 7.5%

Melting/freezing point

60°F

Boiling point

212°F



Flash Point	> 201°F (Pensky Marten Closed Cup)
Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability (gas)	No data available
Flammability (liquid)	No data available
Upper/lower flammability or explosive limits	
Lower (%)	No data available
Upper (%)	No data available
Autoignition temperature	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative Density	1.56 g/ml
Solubility	Soluble (water)
Partition coefficient	No data available
Decomposition temperature	No data available
Viscosity	No data available
Volatiles by volume	No data available

10. STABILITY AND REACTIVITY

Reactivity	Soluble in water, releasing heat sufficient to ignite combustibles. Reacts with metals, and may form hydrogen gas
Chemical stability	Product is stable under normal conditions. Mixing with water, acid, or incompatible materials may cause splattering and release of large amounts of heat. Will react with some metals forming flammable hydrogen gas. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces.
Possible hazardous reactions	
Conditions to avoid	Mixing with incompatible materials Acids and halogenated compounds, Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys, Releases heat when diluted in water.
Incompatible Materials	
Hazardous decomposition products	Oxides of sodium

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Inhalation of mists could have a corrosive effect on the respiratory tract
Skin contact	Causes skin corrosion
Eye contact	Risk of serious damage to the eyes.
Ingestion	Corrosive. If swallowed, may cause severe oral and esophageal, mucus membrane, and gastrointestinal burns and possible perforation. If swallowed, may pose a lung aspiration hazard during vomiting.
Acute toxicity	
Acute oral toxicity	LD50 (rat): 325 mg/kg
Acute inhalation toxicity	No data available



Acute dermal toxicity	No data available
Acute toxicity (other)	No data available
<u>Skin corrosion/irritation</u>	Causes skin corrosion
<u>Serious eye damage/irritation</u>	Risk of serious damage to the eyes.
<u>Respiratory or skin sensitization</u>	Does not cause sensitization
<u>Germ cell mutagenicity</u>	No data available
<u>Carcinogenicity</u>	Not classified as a carcinogen by IARC, ACGIH, NTP, or OSHA
<u>Toxicity for reproduction and development</u>	
Reproductive toxicity	Not expected to cause reproductive effects.
Developmental toxicity	Not expected to cause developmental effects.
<u>Specific target organ toxicity</u>	
Single exposure	No data available
Repeated exposure	No data available
<u>Aspiration toxicity</u>	No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity to fish	No data available
Acute toxicity to aquatic invertebrates	No data available
Toxicity to aquatic plants	No data available
Toxicity to microorganisms	No data available
Chronic toxicity to fish	No data available
Chronic toxicity to aquatic invertebrates	No data available
Chronic toxicity to aquatic plants	No data available

Persistence and degradability

Biodegradability	Inorganic. Not subject to biodegrade
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Bioaccumulative potential

Partition coefficient: n-octanol/water	No data available
Bioconcentration factor (BCF)	No data available

Mobility in soil

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Disposal instructions

Dispose of contents/container in accordance with local/state/federal regulations.

Hazardous waste code

Regulated as a hazardous waste. D002

Waste from residues/unused products




Dispose of contents/container in accordance to local/state/federal regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORTATION INFORMATION



	UN Number	Description	Hazardous Class	Packing Group	Label
DOT	UN1824	Sodium Hydroxide, Solution	8	II	
IATA	UN1824	Sodium Hydroxide, Solution	8	II	
IMDG	UN1824	Sodium Hydroxide, Solution	8	II	

Marine Pollutant (Yes/No)

No

Notes

Please refer to latest shipping document for the most up to date shipping information including exemptions and special circumstances. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations

15. REGULATORY INFORMATION

Inventory Information

- United States TSCA Inventory
- Canadian Domestic Substances List (DSL)
- Australia Inventory of Chemical Substances (AICS)
- Japan. CSCL - Inventory of Existing and New Chemical Substances
- Korea. Korean Existing Chemicals Inventory (KECI)
- China. Inventory of Existing Chemical Substances in China (IECSC)

Status

On TSCA Inventory
 All components of this product are on the Canadian DSL
 On the inventory, or in compliance with the inventory
 On the inventory, or in compliance with the inventory
 On the inventory, or in compliance with the inventory
 On the inventory, or in compliance with the inventory

US. EPA EPCRA SARA Title III

SARA Sections 311/312

Fire Hazard	Reactivity Hazard	Pressure Hazard	Acute Health	Chronic Health
No	Yes	No	Yes	No

SARA Section 313 Toxic Chemicals

Component/Ingredient	CAS #	Concentration
No component listed		

SARA Section 302 Extremely Hazardous Substance



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Component/Ingredient	CAS #	Reportable Qty.
No component listed		

SARA Section 304 Emergency Release Notification

Component/Ingredient	CAS #	Reportable Qty.
No component listed		

US. EPA CERCLA Hazardous Substances and Reportable Quantities

Component/Ingredient	CAS #	Reportable Qty.
Sodium Hydroxide	1310-73-2	2,000 lb

Clean Air Act (CAA)

Component/Ingredient	CAS #
No component listed	

Safe Drinking Water Act (SDWA)

Component/Ingredient	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
No component listed				

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

Component/Ingredient	CAS #
No component listed	

16. OTHER INFORMATION

NFPA (National Fire Protection Association) – Classification

Health	3
Flammability	0
Reactivity	1

HMIS (Hazardous Materials Identification System – Classification

Health	3
Flammability	0
Reactivity	1

PPE Determined by user; dependent on local conditions

Further Information

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Revision Note	None

Disclaimer

The information provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge, information, and belief at the date of its publication. This SDS is designed only as a guidance for the products to which it applies. No warranty, express, or implied, is given with regards to the accuracy, completeness, or adequacy of the information contained herein. Regulations requirements are subject to change and may differ between various locations, and it is the user's responsibility to ensure that their activities comply with all federal, state, and local laws. The manufacturer, agent, directors, officers, contractors, or employees of either are not liable to any party



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