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Version 1.0

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Liquid Laundry Builder

### Other Means of Identification

**Product Code** 420800

### Recommended use of the Chemical and Restrictions on Use

**Recommended Use** Laundry detergent builder. For industrial use.

### Details of the Supplier of the Safety Data Sheet

Midlab, Inc.  
140 Private Brand Way  
Athens, TN 37303

### Emergency Telephone Number

**Company Phone Number** Phone: 1-423-337-3180  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Colorless

**Physical State** Liquid

**Odor** Bland

### Classification

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Corrosive to Metals	Category 1

### Signal Word

**Danger**

### Hazard Statements

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



### Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.  
Wash face, hands and any exposed skin thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Keep only in original container.

### Precautionary Statements - Response

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

**Precautionary Statements - Storage**

Store locked up.  
Store in a corrosive resistant container with a resistant inner liner.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Hazards Not Otherwise Classified (HNOC)**

May be harmful if swallowed.

**Other Hazards**

None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	60-100
Potassium Hydroxide	1310-58-3	5-10
Tetrapotassium Pyrophosphate	7320-34-5	5-10
Sodium Silicate	1344-09-8	1-5
Sodium Hydroxide	1310-73-2	1-5

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	Immediately call a POISON CENTER or doctor/physician.
<b>Eye Contact</b>	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. Contact lenses should be discarded.
<b>Skin Contact</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.
<b>Ingestion</b>	IF SWALLOWED: call a poison control center or physician immediately. Never give anything by mouth to an unconscious person. Rinse mouth. Drink plenty of water. Do not induce vomiting.

**Most Important Symptoms and Effects**

<b>Symptoms</b>	Causes severe skin burns and eye damage.
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**Indication of any Immediate Medical Attention and Special Treatment Needed**

<b>Notes to Physician</b>	May aggravate pre-existing skin disorders. Any lung condition may be aggravated.
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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Water spray (fog). Carbon dioxide (CO<sub>2</sub>). Dry chemical. Foam.

**Unsuitable Extinguishing Media**

Not determined.

**Specific Hazards Arising from the Chemical**

Product is not flammable.

**Hazardous Combustion Products**

Normal products of combustion.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**

<b>Personal Precautions</b>	Use personal protection recommended in Section 8.
<b>Environmental Precautions</b>	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13, Disposal Considerations, for additional information.

**Methods and Material for Containment and Cleaning Up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so. For large spills, dike far ahead of liquid spill for later disposal.
<b>Methods for Clean-Up</b>	Contain and collect with an inert absorbent and place into an appropriate container for disposal. Dilute remaining residue with water and neutralize with dilute acetic acid (vinegar).

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

<b>Advice on Safe Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. For Industrial or professional use only.
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**Conditions for Safe Storage, including any Incompatibilities**

<b>Storage Conditions</b>	Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep from freezing. Protect from excessive heat. Keep out of the reach of children.
<b>Incompatible Materials</b>	Acids. Oxidizing agents. Iron. Rust. Copper. Cobalt. Nickel. Nitrogen compounds. Urea. Organic materials.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium Hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Sodium Hydroxide 1310-73-2	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> (vacated) Ceiling: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>

**Appropriate Engineering Controls**

<b>Engineering Controls</b>	Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.
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**Individual Protection Measures, such as Personal Protective equipment**

<b>Eye/Face Protection</b>	Wear goggles or chemical safety glasses. For Industrial or professional use only.
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<b>Skin and Body Protection</b>	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure.
<b>Respiratory Protection</b>	No respiratory protection is necessary during normal use conditions. In the case of insufficient ventilation or if exposure limits are exceeded, use a suitable NIOSH/MSHA respiratory device.
<b>General Hygiene Considerations</b>	Wash contaminated clothing before reuse. Wash face, hands and any exposed skin thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<b>Physical State</b>	Liquid	<b>Odor</b>	Bland
<b>Appearance</b>	Clear	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Colorless		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
<b>pH</b>	13.5-14.0		
<b>Melting Point/Freezing Point</b>	~ 0 °C / 32 °F		
<b>Boiling Point/Boiling Range</b>	~ 100 °C / 212 °F		
<b>Flash Point</b>	None		Tag Closed Cup
<b>Evaporation Rate</b>	Not determined		
<b>Flammability (Solid, Gas)</b>	Liquid-not applicable		
<b>Upper Flammability Limits</b>	Not determined		
<b>Lower Flammability Limit</b>	Not determined		
<b>Vapor Pressure</b>	Not determined		
<b>Vapor Density</b>	Not determined		
<b>Specific Gravity</b>	1.26		
<b>Water Solubility</b>	Completely soluble		@ 25 °C (77 °F)
<b>Solubility in other solvents</b>	Not determined		
<b>Partition Coefficient</b>	Not determined		
<b>Autoignition Temperature</b>	Not determined		
<b>Decomposition Temperature</b>	Not determined		
<b>Kinematic Viscosity</b>	Not determined		
<b>Dynamic Viscosity</b>	Not determined		
<b>Explosive Properties</b>	None known		
<b>Oxidizing Properties</b>	Not determined		

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Hazardous Polymerization

Hazardous polymerization does not occur.

### Conditions to Avoid

Elevated temperatures. Keep from freezing. Reacts with incompatible materials. Keep out of reach of children.

### Incompatible Materials

Acids. Oxidizing agents. Iron. Rust. Copper. Cobalt. Nickel. Nitrogen compounds. Urea. Organic materials.

### Hazardous Decomposition Products

Oxygen when exposed to copper, nickel, cobalt, iron or iron compounds.

## 11. TOXICOLOGICAL INFORMATION

**Information on Likely Routes of Exposure****Product Information**

<b>Eye Contact</b>	Causes severe eye damage.
<b>Skin Contact</b>	Causes severe skin burns.
<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Ingestion</b>	May be harmful if swallowed. Do not taste or swallow.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium Hydroxide 1310-58-3	= 214 mg/kg ( Rat )	-	-
Sodium Silicate 1344-09-8	= 1153 mg/kg ( Rat )	> 4640 mg/kg ( Rabbit )	-
Sodium Hydroxide 1310-73-2	-	= 1350 mg/kg ( Rabbit )	-
Tetrapotassium Pyrophosphate 7320-34-5	-	> 4640 mg/kg ( Rabbit )	-

**Information on Physical, Chemical and Toxicological Effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure**

**Carcinogenicity** Not classifiable as a human carcinogen.

**Chronic Toxicity** Chronic exposure may cause liver, kidney and/or blood disorders.

**Numerical Measures of Toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic life with long lasting effects.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Potassium Hydroxide 1310-58-3	-	80: 96 h <i>Gambusia affinis</i> mg/L LC50 static	-	-
Sodium Silicate 1344-09-8	-	301 - 478: 96 h <i>Lepomis macrochirus</i> mg/L LC50 3185: 96 h <i>Brachydanio rerio</i> mg/L LC50 semi-static	-	216: 96 h <i>Daphnia magna</i> mg/L EC50
Sodium Hydroxide 1310-73-2	-	45.4: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	-	-
Tetrapotassium Pyrophosphate 7320-34-5	-	100: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50	-	100: 48 h water flea mg/L EC50

**Persistence/Degradability**

Not determined

**Bioaccumulation**

Not determined

**Mobility**

Chemical Name	Partition Coefficient
Potassium Hydroxide 1310-58-3	0.83

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods**

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Potassium Hydroxide 1310-58-3	Toxic Corrosive
Sodium Hydroxide 1310-73-2	Toxic Corrosive

**14. TRANSPORT INFORMATION****Note**

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

**DOT**

UN3266, Corrosive Liquid, Basic, Inorganic, NOS (Containing Sodium Hydroxide and Potassium Hydroxide), 8, PG II

**IATA****IMDG****15. REGULATORY INFORMATION****International Inventories****TSCA** Listed**Legend:***TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS - Japan Existing and New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances**KECL - Korean Existing and Evaluated Chemical Substances**PICCS - Philippines Inventory of Chemicals and Chemical Substances***US Federal Regulations****CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium Hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Sodium Hydroxide 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**SARA 311/312 Hazard Categories**

Acute Health Hazard Yes  
Chronic Health Hazard Yes

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium Hydroxide 1310-58-3	1000 lb			X
Sodium Hydroxide 1310-73-2	1000 lb			X

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	State List
Potassium Hydroxide 1310-58-3	MA, NJ, PA
Sodium Hydroxide 1310-73-2	MA, NJ, PA

AZ – Arizona Ambient Air Quality Guidelines  
CT – Connecticut Hazardous Air Pollutants  
CA – California Director's List of Hazardous Substances  
CAP65 – California Prop 65  
FL – Florida Substances List  
ID – Idaho Non-Carcinogen Toxic Air Pollutants

IL – Illinois Toxic Air Contaminate- Carcinogenic  
MA – Massachusetts Right to Know List  
MN – Minnesota Hazardous Substances List  
NJ – New Jersey Right to Know List  
PA – Pennsylvania Right to Know List  
RI – Rhode Island Hazardous Substances List

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	Not determined	Not determined	Not determined	Not determined
<b>HMIS</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	3	0	0	Not determined

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**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Keep Out of Reach of Children. For Industrial and Institutional Use Only.

\*Denotes changes from last version.

**End of Safety Data Sheet**