

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product name** SILICA REAGENT #2

### Other means of identification

**Product Code(s)** 4467  
**UN-No** 1814

### Recommended use of the chemical and restrictions on use

**Recommended Use** Use as a laboratory reagent. Laboratory chemicals. Industrial (not for food or food contact use).

### Details of the supplier of the safety data sheet

**Manufacturer Address**  
 LaMotte Company, Inc.  
 802 Washington Avenue  
 P.O. Box 329  
 Chestertown, MD 21620 USA  
 T 410-778-3100  
 F 410-778-9748

### Emergency telephone number

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

## 2. HAZARDS IDENTIFICATION

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

### EMERGENCY OVERVIEW

#### DANGER

#### **Hazard statements**

Causes severe skin burns and eye damage.



**Appearance** Clear to slightly cloudy  
 colorless

**Physical state** liquid

**Odor** Odorless

#### **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.

#### **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician. Specific treatment (see .? on this label).

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: Rinse mouth. DO NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up.

**Precautionary Statements - Disposal**

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

**Unknown Acute Toxicity**

10% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Potassium hydroxide	1310-58-3	4
Ammonium molybdate tetrahydrate	12054-85-2	10
Water	7732-18-5	to 100%

### 4. FIRST AID MEASURES

**First Aid Measures**

<b>General advice</b>	Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray.
<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. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Call a physician immediately.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Immediate medical attention is required.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is required. Never give anything by mouth to an unconscious person. Rinse mouth.
<b><u>Self-protection of the first aider</u></b>	Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with eyes, skin and clothing.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), or foam.

**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**

**Personal precautions** Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation, especially in confined areas.

**Environmental precautions** See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for containment** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dispose of contents/containers in accordance with local regulations.

**Methods for cleaning up** Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Do not eat, drink or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials. Do not store in metal containers. Keep out of the reach of children.

**Incompatible Products** Strong acids. Metals. Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	-	Ceiling: 2 mg/m <sup>3</sup>
Ammonium molybdate tetrahydrate 12054-85-2	TWA: 0.5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup>
Water 7732-18-5	-	-	Not Established

**Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Gloves & Lab Coat. Impervious clothing. Rubber gloves. Nitrile rubber.

**Respiratory protection** Maintain adequate ventilation.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Take off contaminated clothing and wash before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

**Physical state** liquid

**Appearance** Clear to slightly cloudy colorless **Odor** Odorless

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		No information available
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

**Other Information**

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Incompatible Products.
<b>Incompatible materials</b>	Strong acids. Metals. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Potassium Oxides.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium hydroxide 1310-58-3	= 284 mg/kg ( Rat )	Not Established	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established
Water 7732-18-5	> 90 mL/kg ( Rat )	Not Established	Not Established

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Potassium hydroxide 1310-58-3	Not Established	Not Established	Not Established	Not Established
Ammonium molybdate	A3	Not Established	Not Established	Not Established

tetrahydrate 12054-85-2				
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established

ACGIH (American Conference of Governmental Industrial Hygienists)  
A3 - Animal Carcinogen

ATEmix (oral) 12500 mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Unknown Aquatic Toxicity** 10 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Potassium hydroxide 1310-58-3	Not Established	80: 96 h Gambusia affinis mg/L LC50 static	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established

### Persistence and degradability

Based on components product is expected to be poorly eliminated from water and poorly biodegradable.

### Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Potassium hydroxide 1310-58-3	0.65 0.83
Ammonium molybdate tetrahydrate 12054-85-2	Not Established
Water 7732-18-5	Not Established

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

Dispose of waste product or used containers according to local regulations. Should not be released into the environment.

### Contaminated packaging

Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Potassium hydroxide 1310-58-3	Not Established	-	Not Established	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	-	Not Established	Not Established
Water 7732-18-5	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Potassium hydroxide 1310-58-3	Not Established	Not Established	Not Established	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Potassium hydroxide 1310-58-3	-

Ammonium molybdate tetrahydrate 12054-85-2	-
Water 7732-18-5	-

### 14. TRANSPORT INFORMATION

**DOT**

**Proper shipping name** POTASSIUM HYDROXIDE SOLUTION  
**UN-No** 1814  
**Hazard Class** 8  
**Packing group** II

**IATA**

**Proper shipping name** POTASSIUM HYDROXIDE SOLUTION  
**UN-No** 1814  
**Hazard Class** 8  
**Packing group** III

**IMDG/IMO**

**Proper shipping name** POTASSIUM HYDROXIDE SOLUTION  
**UN-No** 1814  
**Hazard Class** 8  
**Packing group** II

### 15. REGULATORY INFORMATION

**International Inventories**

**TSCA** Does not comply  
**DSL/NDSL** Complies  
**EINECS/ELINCS** Does not comply  
**ENCS** Complies  
**IECSC** Complies  
**KECL** Does not comply  
**PICCS** Complies  
**AICS** Complies

**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  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Potassium hydroxide 1310-58-3	Not Established
Ammonium molybdate tetrahydrate	1.0

12054-85-2	
Water 7732-18-5	Not Established

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide 1310-58-3	1000 lb	Not Established	Not Established	X
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Potassium hydroxide 1310-58-3	1000 lb	Not Established	RQ 1000 lb final RQ RQ 454 kg final RQ
Ammonium molybdate tetrahydrate 12054-85-2	-	Not Established	-
Water 7732-18-5	-	Not Established	-

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

This product does not contain any Proposition 65 chemicals

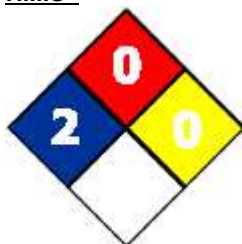
Chemical name	California Proposition 65
Potassium hydroxide 1310-58-3	Not Established
Ammonium molybdate tetrahydrate 12054-85-2	Not Established
Water 7732-18-5	Not Established

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

Component	CPSC (Consumer Product Safety Commission) - Specially Regulated Substances		
Potassium hydroxide 1310-58-3 ( 4 )	Banned, 16 CFR 1500.17 (>=10% by weight in liquid drain cleaners); Add POISON to label, 16 CFR 1500.129 (>=10%, free or chemically unneutralized)		
Chemical name	New Jersey	Massachusetts	Pennsylvania
Potassium hydroxide 1310-58-3	X	X	X
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	X

**16. OTHER INFORMATION**

<u>NFPA</u>	Health hazard 2	Flammability 0	Instability 0	Physical and Chemical Hazards N/A
<u>HMIS</u>	Health hazard 2	Stability 1		



Health Hazard	<b>2</b>
Fire Hazard	<b>0</b>
Reactivity	<b>1</b>

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Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of Material Safety Data Sheet**