Safety Data Sheet

Issuing Date Jun-10-2015 **Revision Date** Jan-26-2016 **Revision Number** 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier - Labeling according to Regulations (EC) No 1272/2008

Product Code(s) **V-4466**
Product name **Silica #1**

1.2. Relevant identified uses of the substance or mixture and uses advised against

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

1.3. Details of the supplier of the safety data sheet

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

For further information, please contact

Person Regulatory Affairs Department
E-mail address msds@lamotte.com

1.4. 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

Section 2: HAZARD(S) INDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 1 - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Specific target organ toxicity (single exposure)	Category 3 - (H335)

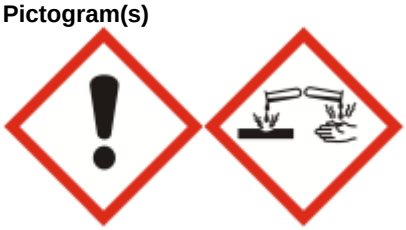
2.1.2 Classification according to Directive 67/548/EEC or 1999/45/EC
For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

Symbol(s)
C - Corrosive

R-code(s)
Xn;R20 - C;R35 - Xi;R37

2.2. Label elements

Pictogram(s)



Signal word DANGER

Hazard statements H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage H332 - Harmful if inhaled H335 - May cause respiratory irritation

Precautionary Statements - EU (§28, 1272/2008)
P280 - Wear protective gloves/protective clothing/eye protection/face protection. P260 - Do not breathe dust/fume/gas/mist/vapors/spray. P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P280 - Wear eye protection/ face protection. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor/physician.

2.3. Other hazards

None
Contains Hydrochloric acid

Section 3: COMPOSITION/ INFORMATION OF INGREDIENTS

3.1 Substances

Chemical name	EC No	CAS No	Weight-%	Classification	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No
Hydrochloric acid	EEC No. Present	7647-01-0	20	T; R23 C; R35 C; R34 Xi; R37	Acute Tox. 3 (H331) Skin Corr. 1A (H314) Press. Gas	-

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. Call a physician immediately.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Call a physician immediately.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Ingestion Do NOT induce vomiting. Call a physician immediately. Drink plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protection recommended in Section 8.

4.2. Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3. Indication of any immediate medical attention and special treatment needed
No data available

Section 5: FIREFIGHTER MEASURES

5.1. Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
No information available

5.2. Special hazards arising from the substance or mixture
No information available

5.3. Advice for firefighters
Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental precautions

See Section 12 for additional Ecological Information.

6.3. 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 Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. After cleaning, flush away traces with water.

6.4. Reference to other sections For disposal see section 13.

Methods for Containment and Clean Up Pick up and transfer to properly labelled containers.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste

or swallow. Do not eat, drink, or smoke when using this product. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

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.

7.2. Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature. Keep away from direct sunlight. Store away from incompatible materials. Keep out of the reach of children. Keep away from incompatible materials such as cyanides or sulfides. Store away from strong bases or metals. Do not store near combustible materials.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1. Control parameters

Chemical name	Eu	The United Kingdom	France	Spain	Germany
Hydrochloric acid 7647-01-0	Not Established	Not Established	STEL: 5 ppm STEL: 7.6 mg/m³	-	TWA: 2 ppm TWA: 3.0 mg/m³ Ceiling / Peak: 4 ppm Ceiling / Peak: 6 mg/m³ TWA: 3 mg/m³
Chemical name	**Italy**	**Portugal**	**The Netherlands**	**Finland**	**Denmark**
Hydrochloric acid 7647-01-0	-	Not Established	-	Not Established	Not Established
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Hydrochloric acid 7647-01-0	-	STEL: 4 ppm STEL: 6 mg/m³	Not Established	Not Established	Not Established

Chemical name	European Union	United Kingdom	France	Spain	Germany
Hydrochloric acid 7647-01-0	-	-	-	-	-
Chemical name	**Italy**	**Portugal**	**Netherlands**	**Finland**	**Denmark**
Hydrochloric acid 7647-01-0	-	-	-	-	-
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Hydrochloric acid 7647-01-0	-	-	-	-	-

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles). If splashes are likely to occur:. Face protection shield.

Skin and body protection Impervious clothing. Protective gloves. Nitrile rubber.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid		
Appearance	Clear, colorless	**Odor**	pungent

Property	**Values**	**Remarks • Method**
pH	<1	No information available
Melting point / freezing point		No information available
Boiling point / boiling range	ca 101 °C / 214 °F	No information available
Flash point		No information available
Evaporation rate		No information available
Flammability (solid, gas)	.	Not Applicable
Flammability Limit in Air		
Upper flammability limit:		.
Lower flammability limit:		.
Vapor pressure		No information available
Vapor density		No information available
Specific gravity		No information available
Water solubility	Soluble in water	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	

9.2. 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

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous Reactions
None under normal processing.

10.4. Conditions to avoid

Direct sunlight. Incompatible Products.

10.5. Incompatible materials

Strong bases. Metals. Strong reducing agents. Alkalis.

10.6. Hazardous decomposition products

Chlorine gas. Hydrogen chloride.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation There is no data available for this product.

Eye contact There is no data available for this product.

Skin contact There is no data available for this product.

Ingestion There is no data available for this product.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 1,190.00 mg/kg

ATEmix (dermal) 25,050.00 mg/kg

ATEmix (inhalation-dust/mist) 2.51 mg/l

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Sensitization No information available.

Mutagenic effects No information available.

Carcinogenic effects No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Hydrochloric acid	Not Established	282: 96 h Gambusia affinis mg/L LC50 static	Not Established

12.2. Persistence and degradability

No product level data available.

12.3. Bioaccumulative potential

No information available.

Chemical name	Log Pow
Hydrochloric acid	Not Established

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

Chemical name	PBT and vPvB assessment
Hydrochloric acid	-

12.6. Other adverse effects

No information available

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine disrupting potential
Hydrochloric acid	Not Established	Not Established	Not Established

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Dispose of waste product or used containers according to local regulations.

Contaminated packaging Do not reuse empty containers.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

14.1 UN-No 1789
14.2 Proper shipping name HYDROCHLORIC ACID, SOLUTION
14.3 Hazard Class 8
14.4 Packing group II

ICAO

14.1 UN-No 1789
14.2 Proper shipping name HYDROCHLORIC ACID SOLUTION
14.3 Hazard Class 8
14.4 Packing group II
14.5
14.6

IATA

14.1 UN-No 1789
14.2 Proper shipping name HYDROCHLORIC ACID SOLUTION
14.3 Hazard Class 8
14.4 Packing group II
14.5
14.6

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical name	French RG number	Title
Hydrochloric acid	-	-

(CAS # 7647-01-0)		

Germany None

Water contaminating class (Netherlands) None

Switzerland Poison Classification None

European Union None

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this substance/mixture by the supplier.

Section 16: ANY OTHER RELEVANT INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Text of R phrases mentioned in Section 3

R34 - Causes burns
R35 - Causes severe burns
R23 - Toxic by inhalation
R37 - Irritating to respiratory system
R20 - Harmful by inhalation

Full text of H-Statements referred to under section 3

H331 - Toxic if inhaled
H314 - Causes severe skin burns and eye damage

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

TWA - TWA (time-weighted average)
STEL - STEL (Short Term Exposure Limit)
Ceiling - Maximum limit value

Issuing Date Jun-10-2015

Recommendations on Use Laboratory chemicals Industrial (not for food or food contact use) Restricted to professional users

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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 Safety Data Sheet

Safety Data Sheet

Issuing Date Jun-30-2015 **Revision Date** Jun-23-2015 **Revision Number** 1

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

Product identifier

Product name **Silica #3**

Other means of identification

Product Code(s) **4468**

UN-No 3265

Recommended use of the chemical and restrictions on use

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

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
Serious eye damage/eye irritation	Category 1

EMERGENCY OVERVIEW

DANGER POISON

Hazard statements
Causes severe skin burns and eye damage.

Appearance Clear, colorless **Physical state** liquid **Odor** Odorless

Precautionary Statements - Prevention
Do not taste or swallow. 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 physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
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.

Other Hazards
May be harmful if swallowed

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Oxalic acid, dihydrate	6153-56-6	10
Water	7732-18-5	to 100%

4. FIRST AID MEASURES

First Aid Measures

General advice Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Show this safety data sheet to the doctor in attendance.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Call a physician immediately.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. Call a physician immediately.

Ingestion Do NOT induce vomiting. Call a physician immediately. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Use personal protection recommended in Section 8. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Water spray, dry chemical, carbon dioxide (CO_2), 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 See section 8. Ensure adequate ventilation. Use personal protective equipment.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Absorb/Cover spill with sodium bicarbonate or sodium carbonate to neutralize, then place in a chemical waste container for later disposal. Dispose according to federal, state, and local regulations. Do not flush to sewer.

Methods for cleaning up 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. Prevent contact with skin, eyes, 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. Keep away from heat. Keep away from oxidizing agents. Keep out of the reach of children.

Incompatible Products Strong oxidizing agents. Alkalis. Chlorites / Hypochlorites.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Oxalic acid, dihydrate 6153-56-6	2 mg/m³ STEL TWA: 1 mg/m³	TWA: 1 mg/m³	IDLH: 500 mg/m³ TWA: 1 mg/m³ STEL: 2 mg/m³
Water 7732-18-5	-	-	Not Established

NIOSH IDLH: Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

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

Skin and body protection Wear protective gloves/clothing. Wear latex or nitrile gloves.

Respiratory protection Use only with adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene Measures Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid
Appearance Clear, colorless **Odor** Odorless

Property	Values	Remarks • Method
pH	1	No information available
Melting point / freezing point	No information available	
Boiling point / boiling range	101 °C / 214 °F	
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	0.79	
Water solubility	completely soluble	
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

Stability	Stable under normal conditions of use and storage. Heat will contribute to instability.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Excessive heat.
Incompatible materials	Strong oxidizing agents. Alkalis. Chlorites / Hypochlorites.
Hazardous decomposition products	May produce the following when heated to decomposition:. Carbon oxides (COx). Formic acid.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Oxalic acid, dihydrate 6153-56-6	= 375 mg/kg (Rat)	= 20000 mg/kg (Rat)	Not Established
Water 7732-18-5	> 90 mL/kg (Rat)	Not Established	Not Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Oxalic acid, dihydrate 6153-56-6	Not Established	Not Established	Not Established	Not Established
Water 7732-18-5	Not Established	Not Established	Not Established	Not Established

Chronic toxicity May cause adverse kidney effects.

ATEmix (oral) 3750
ATEmix (dermal) 11000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Oxalic acid, dihydrate 6153-56-6	Not Established	4000: 24 h Lepomis macrochirus mg/L LC50 static	125 - 150: 48 h Daphnia magna mg/L EC50 Static
Water 7732-18-5	Not Established	Not Established	Not Established

Persistence and degradability
No information available.

Bioaccumulation/Accumulation
No information available.

Chemical name	Log Pow
Oxalic acid, dihydrate 6153-56-6	-0.81
Water 7732-18-5	Not Established

13. DISPOSAL CONSIDERATIONS

Disposal Methods Should not be released into the environment. Dispose of contents/containers in accordance with local regulations.

Contaminated packaging Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Oxalic acid, dihydrate 6153-56-6	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
Oxalic acid, dihydrate 6153-56-6	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
Oxalic acid, dihydrate 6153-56-6	-
Water 7732-18-5	-

14. TRANSPORT INFORMATION

DOT
Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N. O. S. (10% Oxalic acid dihydrate)
UN-No 3265
Hazard Class 8
Packing group II

IATA

Proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N. O. S. (10% Oxalic acid dihydrate)
UN-No	3265
Hazard Class	8
Packing group	II

IMDG/IMO

Proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N. O. S. (10% Oxalic acid dihydrate)
UN-No	3265
Hazard Class	8
Packing group	II

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Does not comply
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 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

Chemical name	SARA 313 - Threshold Values %
Oxalic acid, dihydrate 6153-56-6	Not Established
Water 7732-18-5	Not Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as 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
Oxalic acid, dihydrate 6153-56-6	Not Established	Not Established	Not Established	Not Established
Water	Not Established	Not Established	Not Established	Not Established

7732-18-5				

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
Oxalic acid, dihydrate 6153-56-6	-	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
Oxalic acid, dihydrate 6153-56-6	Not Established
Water 7732-18-5	Not Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Oxalic acid, dihydrate 6153-56-6	X	X	X
Water 7732-18-5	Not Established	Not Established	X

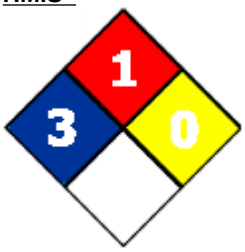
CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

Chemical name	CPSC (Consumer Product Safety Commission) - Specially Regulated Substances
Oxalic acid, dihydrate 6153-56-6	Add POISON to label, 16 CFR 1500.129 (>=10%, free or chemically unneutralized)

16. OTHER INFORMATION

NFPA **Health hazard** 3 **Flammability** 1 **Instability** 0 **Physical and Chemical Hazards** N/A

HMIS



Prepared by	Regulatory Affairs Department
Issuing Date	Jun-30-2015
Revision Date	Jun-30-2015
Reason for revision	New US GHS format

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

Safety Data Sheet

Issuing Date May-20-2015 **Revision Date** Feb-04-2016 **Revision Number** 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier - Labeling according to Regulations (EC) No 1272/2008

Product Code(s) **V-4468**
Product name **Silica #3**

Synonyms none
Substance or Preparation Preparation

1.2. Relevant identified uses of the substance or mixture and uses advised against

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

1.3. Details of the supplier of the safety data sheet

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

Contact for timely inquiries in regards to this product:

Person Regulatory Affairs Department
E-mail address msds@lamotte.com

1.4. 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

Section 2: HAZARD(S) INDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Skin corrosion/irritation	Category 1 - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)

2.1.2 Classification according to Directive 67/548/EEC or 1999/45/EC
For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

Symbol(s)
C - Corrosive

R-code(s)
Xn;R21/22 - C;R35

2.2. Label elements

Pictogram(s)

Signal word DANGER

Hazard statements H314 - Causes severe skin burns and eye damage

Precautionary Statements - EU (§28, 1272/2008)
P280 - Wear protective gloves/protective clothing/eye protection/face protection. P260 - Do not breathe dust/fume/gas/mist/vapors/spray. P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P280 - Wear eye protection/ face protection. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor/physician.

2.3. Other hazards
May be harmful if swallowed
Irritating to eyes, respiratory system and skin
Harmful if swallowed

Section 3: COMPOSITION/ INFORMATION OF INGREDIENTS

3.1 Substances

Not Applicable

3.2 Mixtures

Chemical name	EC No	CAS No	Weight-%	Classification	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No
Oxalic acid, dihydrate	-	6153-56-6	10	Xn; R21/22	Acute Tox. 4 (H302) Acute Tox. 4 (H312)	-

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. Call a physician immediately.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Call a physician immediately.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Ingestion Do NOT induce vomiting. Call a physician immediately. Drink plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protection recommended in Section 8.

4.2. Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3. Indication of any immediate medical attention and special treatment needed
No data available

Section 5: FIREFIGHTER MEASURES

5.1. Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
No information available

5.2. Special hazards arising from the substance or mixture
No information available

5.3. Advice for firefighters
As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental precautions

See Section 12 for additional Ecological Information.

6.3. 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 Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. After cleaning, flush away traces with water.

6.4. Reference to other sections For disposal see section 13.

Methods for Containment and Clean Up Pick up and transfer to properly labelled containers.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste

or swallow. Do not eat, drink, or smoke when using this product. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Hygiene Measures
Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature. Keep away from direct sunlight. Store away from incompatible materials. Keep out of the reach of children. Keep away from incompatible materials such as cyanides or sulfides. Store away from strong bases or metals. Do not store near combustible materials.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1. Control parameters

Chemical name	Eu	The United Kingdom	France	Spain	Germany
Oxalic acid, dihydrate 6153-56-6	TWA: 1 mg/m³	TWA: 1 mg/m³ STEL: 2 mg/m³	TWA: 1 mg/m³	TWA: 1 mg/m³	TWA: 1 mg/m³
Chemical name	**Italy**	**Portugal**	**The Netherlands**	**Finland**	**Denmark**
Oxalic acid, dihydrate 6153-56-6	TWA: 1 mg/m³	TWA: 1 mg/m³ STEL: 2 mg/m³	TWA: 1 mg/m³	TWA: 1 mg/m³ STEL: 3 mg/m³ iho*	TWA: 1 mg/m³
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Oxalic acid, dihydrate 6153-56-6	TWA: 1 mg/m³ H*	TWA: 1 mg/m³	STEL: 2 mg/m³ TWA: 1 mg/m³	TWA: 1 mg/m³ STEL: 1 mg/m³	TWA: 1 mg/m³ STEL: 3 mg/m³

Chemical name	European Union	United Kingdom	France	Spain	Germany
Oxalic acid, dihydrate 6153-56-6	-	-	-	-	-
Chemical name	**Italy**	**Portugal**	**Netherlands**	**Finland**	**Denmark**
Oxalic acid, dihydrate 6153-56-6	-	-	-	-	-
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Oxalic acid, dihydrate 6153-56-6	-	-	-	-	-

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Personal protective equipment

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

Hand protection Rubber/latex/neoprene or other suitable chemical resistant gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure. Wear nitrile gloves.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure No information available.

controls

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid		
Appearance	Clear, colorless	**Odor**	Odorless

Property	**Values**	**Remarks • Method**
pH	1	
Melting point / freezing point		No information available
Boiling point / boiling range		No information available
Flash point		No information available
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limit in Air		
Upper flammability limit:		Not applicable
Lower flammability limit:		Not applicable
Vapor pressure		No information available
Vapor density		No information available
Specific gravity	0.79	No information available
Water solubility	completely soluble	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	

9.2. 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

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Heat will contribute to instability. Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization
Hazardous polymerization does not occur.

Hazardous Reactions
None under normal processing.

10.4. Conditions to avoid

Excessive heat. Incompatible Products.

10.5. Incompatible materials

Strong bases. Metals. Strong reducing agents. Alkalis.

10.6. Hazardous decomposition products

May produce the following when heated to decomposition:. Carbon oxides (COx). Formic acid.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation There is no data available for this product.
Eye contact There is no data available for this product.
Skin contact There is no data available for this product.
Ingestion There is no data available for this product.

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (oral) 3,750.00 mg/kg
ATEmix (dermal) 11,000.00 mg/kg

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Oxalic acid, dihydrate	= 375 mg/kg (Rat)	= 20000 mg/kg (Rat)	

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Sensitization No information available.

Mutagenic effects No information available.

Carcinogenic effects No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Oxalic acid, dihydrate	Not Established	4000: 24 h Lepomis macrochirus mg/L LC50 static	125 - 150: 48 h Daphnia magna mg/L EC50 Static

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical name	Log Pow
Oxalic acid, dihydrate	-0.81

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

Chemical name	PBT and vPvB assessment
Oxalic acid, dihydrate	-

12.6. Other adverse effects

No information available

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine disrupting potential
Oxalic acid, dihydrate	Not Established	Not Established	Not Established

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Dispose of waste product or used containers according to local regulations.

Contaminated packaging Do not reuse empty containers.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

14.1 UN-No 3265
14.2 Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Oxalic acid)
14.3 Hazard Class 8
14.4 Packing group II

ICAO

14.1 UN-No 3265
14.2 Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Oxalic acid)
14.3 Hazard Class 8
14.4 Packing group II
14.5
14.6

IATA

14.1 UN-No 3265
14.2 Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Oxalic acid)
14.3 Hazard Class 8
14.4 Packing group II
14.5

14.6

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical name	French RG number	Title
Oxalic acid, dihydrate (CAS # 6153-56-6)	-	-

Germany None

Water contaminating class (Netherlands) None

Switzerland Poison Classification None

European Union None

International Inventories

TSCA	Complies
DSL/NDSL	Does not comply
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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this substance/mixture by the supplier.

Section 16: ANY OTHER RELEVANT INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Text of R phrases mentioned in Section 3

R35 - Causes severe burns
R21/22 - Harmful in contact with skin and if swallowed

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed
H312 - Harmful in contact with skin

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

TWA - TWA (time-weighted average)
STEL - STEL (Short Term Exposure Limit)
Ceiling - Maximum limit value

Prepared by Regulatory Affairs Department

Issuing Date May-20-2015

Reason for revision	Update to Format.
Recommendations on Use	Laboratory chemicals Industrial (not for food or food contact use) Restricted to professional users

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
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End of Safety Data Sheet

Safety Data Sheet

OSHA format

Issuing Date Jan-26-2016 **Revision Number** 0

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) **V-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

EMERGENCY OVERVIEW

DANGER

Hazard statements
Causes severe skin burns and eye damage.

Appearance Clear to slightly cloudy **Physical state** liquid **Odor** Odorless
Colorless

Precautionary Statements - Prevention
Do not taste or swallow. 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
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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.

Other Hazards
Harmful to aquatic life with long lasting effects

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

4. FIRST AID MEASURES

First Aid Measures

General advice Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

Eye contact 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.

Skin contact 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.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician immediately.

Ingestion Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is required. Never give anything by mouth to an unconscious person. Rinse mouth.

Self-protection of the first aider 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. FIREFIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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/m³	-	Ceiling: 2 mg/m³
Ammonium molybdate tetrahydrate 12054-85-2	TWA: 0.5 mg/m³	TWA: 5 mg/m³	IDLH: 1000 mg/m³

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.

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

Property	Values	Remarks • Method
pH	8	
Melting point / freezing point	No information available	

Boiling point / boiling range	No information available
Flash point	Not Applicable
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

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

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component identification

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

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 tetrahydrate 12054-85-2	A3	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 96 % 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

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

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

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

Chemical name	California Hazardous Waste Status
Potassium hydroxide 1310-58-3	-
Ammonium molybdate tetrahydrate 12054-85-2	-

14. TRANSPORT INFORMATION

DOT

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

IATA

UN-No 1814
Proper shipping name POTASSIUM HYDROXIDE SOLUTION

Hazard Class	8
Packing group	II

IMDG/IMO

UN-No	1814
Proper shipping name	POTASSIUM HYDROXIDE, SOLUTION
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 12054-85-2	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	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

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	-

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

U.S. State Right-to-Know Regulations

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

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

Chemical name	CPSC (Consumer Product Safety Commission) - Specially Regulated Substances
Potassium hydroxide 1310-58-3	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)

16. OTHER INFORMATION

NFPA **Health hazard** 2 **Flammability** 0 **Instability** 0 **Physical and Chemical Hazards** N/A

Health hazard 2 **Flammability** 0 **Stability** 1

Prepared by Regulatory Affairs Department
Issuing Date Jan-26-2016

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 Safety Data Sheet

Safety Data Sheet

Issuing Date Jan-26-2016 **Revision Date** Jan-26-2016 **Revision Number** 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier - Labeling according to Regulations (EC) No 1272/2008

Product Code(s) **V-4467**
Product name **SILICA REAGENT #2**

Substance or Preparation Preparation

1.2. Relevant identified uses of the substance or mixture and uses advised against

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

1.3. Details of the supplier of the safety data sheet

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

Contact for timely inquiries in regards to this product:

Person Regulatory Affairs Department
E-mail address msds@lamotte.com

1.4. 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

Section 2: HAZARD(S) INDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Skin corrosion/irritation	Category 1 Sub-category B - (H314)

2.1.2 Classification according to Directive 67/548/EEC or 1999/45/EC
For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

Symbol(s)
C - Corrosive

R-code(s)
C;R34

2.2. Label elements

Pictogram(s)

Signal word DANGER

Hazard statements H314 - Causes severe skin burns and eye damage

Precautionary Statements - EU (§28, 1272/2008)
P280 - Wear protective gloves/protective clothing/eye protection/face protection. P260 - Do not breathe dust/fume/gas/mist/vapors/spray. P310 - Immediately call a POISON CENTER or doctor/physician. P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

None
Contains Potassium hydroxide

Section 3: COMPOSITION/ INFORMATION OF INGREDIENTS

3.1 Substances

Not Applicable

3.2 Mixtures

Chemical name	EC No	CAS No	Weight-%	Classification	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No
Potassium hydroxide	EEC No. Present	1310-58-3	4	Xn; R22 C; R35	Acute Tox. 4 (H302) Skin Corr. 1A (H314)	-
Ammonium molybdate tetrahydrate	-	12054-85-2	10	-	No data available	-

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician immediately.

Skin contact 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.

Eye contact 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.

Ingestion Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is required.

Never give anything by mouth to an unconscious person. Rinse mouth.

Self-protection of the first aider 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.

4.2. Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3. Indication of any immediate medical attention and special treatment needed
No data available

Section 5: FIREFIGHTER MEASURES

5.1. Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
No information available

5.2. Special hazards arising from the substance or mixture
No information available

5.3. Advice for firefighters
As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. 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.

For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental precautions

See Section 12 for additional Ecological Information.

6.3. 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.

6.4. Reference to other sections For disposal see section 13.

Methods for Containment and Clean Up Pick up and transfer to properly labelled containers.

Section 7: HANDLING AND STORAGE

7.1. 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.

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.

7.2. 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.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1. Control parameters

Chemical name	Eu	The United Kingdom	France	Spain	Germany
Potassium hydroxide 1310-58-3	Not Established	STEL: 2 mg/m³	STEL: 2 mg/m³	VLA-EC: 2 mg/m³ VLA-EC	-
Ammonium molybdate tetrahydrate 12054-85-2	Not Established	STEL: 10 mg/m³ STEL: 20 mg/m³ TWA: 10 mg/m³ TWA: 5 mg/m³	TWA: 5 mg/m³ STEL: 10 mg/m³	VLA-ED: 10 VLA-ED: 5	-
Chemical name	**Italy**	**Portugal**	**The Netherlands**	**Finland**	**Denmark**
Potassium hydroxide 1310-58-3	-	Ceiling: 2 mg/m³	-	Ceiling: 2 mg/m³	Ceiling: 2 mg/m³
Ammonium molybdate tetrahydrate 12054-85-2	-	TWA: 0.5 mg/m³ TWA: 10 mg/m³ TWA: 3 mg/m³	MAC: 10 MAC: 5	TWA: 0.5 mg/m³	TWA: 10 mg/m³ TWA: 5 mg/m³
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Potassium hydroxide 1310-58-3	MAK: 2 mg/m³ MAK (inhalable fraction)	Not Established	NDSCh: 1 mg/m³ NDS: 0.5 mg/m³	Ceiling: 2 mg/m³	STEL: 2 mg/m³
Ammonium molybdate tetrahydrate 12054-85-2	STEL 10 STEL 30 MAK: 15 MAK: 5	Not Established	NDSCh: 10 mg/m³ NDS: 4 mg/m³	TWA: 10 mg/m³ TWA: 5 mg/m³ STEL: 10 mg/m³ STEL: 20 mg/m³	Not Established

Chemical name	European Union	United Kingdom	France	Spain	Germany
Potassium hydroxide 1310-58-3	-	-	-	-	-
Ammonium molybdate tetrahydrate 12054-85-2	-	-	-	-	-
Chemical name	**Italy**	**Portugal**	**Netherlands**	**Finland**	**Denmark**
Potassium hydroxide 1310-58-3	-	-	-	-	-
Ammonium molybdate tetrahydrate 12054-85-2	-	-	-	-	-
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Potassium hydroxide 1310-58-3	-	-	-	-	-
Ammonium molybdate tetrahydrate 12054-85-2	-	-	-	-	-

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas

Personal protective equipment

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

Hand protection Rubber/latex/neoprene or other suitable chemical resistant gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure. Wear nitrile gloves.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state liquid

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

Property	Values	Remarks • Method
pH	8	
Melting point / freezing point		No information available
Boiling point / boiling range		No information available
Flash point		No information available
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limit in Air		
Upper flammability limit:		Not applicable
Lower flammability limit:		Not applicable
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	

9.2. 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

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization
Hazardous polymerization does not occur.

Hazardous Reactions
None under normal processing.

10.4. Conditions to avoid

Incompatible Products.

10.5. Incompatible materials

Strong acids. Metals. Strong oxidizing agents.

10.6. Hazardous decomposition products

Potassium Oxides.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation There is no data available for this product.
Eye contact There is no data available for this product.
Skin contact There is no data available for this product.
Ingestion There is no data available for this product.

Unknown Acute Toxicity 10% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (oral) 12,500.00 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium hydroxide	= 284 mg/kg (Rat)		

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Sensitization No information available.

Mutagenic effects No information available.

Carcinogenic effects No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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	Not Established	80: 96 h Gambusia affinis mg/L LC50 static	Not Established
Ammonium molybdate tetrahydrate	Not Established	Not Established	Not Established

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

No information available.

Chemical name	Log Pow
Potassium hydroxide	0.65 0.83
Ammonium molybdate tetrahydrate	Not Established

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

Chemical name	PBT and vPvB assessment
Potassium hydroxide	-
Ammonium molybdate tetrahydrate	-

12.6. Other adverse effects

No information available

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine disrupting potential
Potassium hydroxide	Not Established	Not Established	Not Established
Ammonium molybdate tetrahydrate	Not Established	Not Established	Not Established

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Dispose of waste product or used containers according to local regulations.

Contaminated packaging Do not reuse empty containers.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

14.1 UN-No 1814
14.2 Proper shipping name POTASSIUM HYDROXIDE, SOLUTION
14.3 Hazard Class 8

14.4 Packing group II

ICAO

14.1 UN-No 1814
14.2 Proper shipping name POTASSIUM HYDROXIDE SOLUTION
14.3 Hazard Class 8
14.4 Packing group II
14.5
14.6

IATA

14.1 UN-No 1814
14.2 Proper shipping name POTASSIUM HYDROXIDE SOLUTION
14.3 Hazard Class 8
14.4 Packing group II
14.5
14.6

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical name	French RG number	Title
Potassium hydroxide (CAS # 1310-58-3)	-	-
Ammonium molybdate tetrahydrate (CAS # 12054-85-2)	-	-

Germany None

Water contaminating class (Netherlands) None

Switzerland Poison Classification None

European Union None

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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this substance/mixture by the supplier.

Section 16: ANY OTHER RELEVANT INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Text of R phrases mentioned in Section 3
R35 - Causes severe burns
R22 - Harmful if swallowed
R34 - Causes burns

Full text of H-Statements referred to under section 3
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION
TWA - TWA (time-weighted average)
STEL - STEL (Short Term Exposure Limit)
Ceiling - Maximum limit value

Prepared by	Regulatory Affairs Department
Issuing Date	Jan-26-2016
Recommendations on Use	Laboratory chemicals Industrial (not for food or food contact use) Restricted to professional users

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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 Safety Data Sheet

Safety Data Sheet

Issuing Date May-20-2015 **Revision Number** 0

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

Product identifier

Product name **SILICA REAGENT #3**

Other means of identification

Product Code(s) **V-4468**

UN-No 3265

Recommended use of the chemical and restrictions on use

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

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
Serious eye damage/eye irritation	Category 1

EMERGENCY OVERVIEW

DANGER Poison

Hazard statements
Causes severe skin burns and eye damage. Toxic if swallowed.

Appearance Clear, colorless **Physical state** liquid **Odor** Odorless

Precautionary Statements - Prevention
Do not taste or swallow. 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.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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
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.

Other Hazards
May be harmful if swallowed

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Oxalic acid, dihydrate	6153-56-6	10

4. FIRST AID MEASURES

First Aid Measures

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Call a physician immediately.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. Call a physician immediately.

Ingestion Do NOT induce vomiting. Call a physician immediately. Drink plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protection recommended in Section 8.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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 Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing.

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 Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. 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. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product. Avoid contact with skin, eyes or clothing. 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 at room temperature. Keep away from direct sunlight. Store away from incompatible materials. Keep out of the reach of children. Keep away from incompatible materials such as cyanides or sulfides. Store away from strong bases or metals. Do not store near combustible materials.

Incompatible Products Strong bases. Metals. Strong reducing agents. Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Oxalic acid, dihydrate 6153-56-6	2 mg/m³ STEL TWA: 1 mg/m³	TWA: 1 mg/m³	IDLH: 500 mg/m³ TWA: 1 mg/m³ STEL: 2 mg/m³

NIOSH IDLH: Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

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

Skin and body protection Wear protective gloves/clothing. Wear latex or nitrile gloves.

Respiratory protection Use only with adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene Measures Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid
Appearance Clear, colorless **Odor** Odorless

Property	Values	Remarks • Method
pH	1	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	0.79	
Water solubility	completely soluble	
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

Stability	Heat will contribute to instability. Stable under recommended storage conditions.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Excessive heat. Incompatible Products.
Incompatible materials	Strong bases. Metals. Strong reducing agents. Alkalis.
Hazardous decomposition products	May produce the following when heated to decomposition:. Carbon oxides (COx). Formic acid.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Oxalic acid, dihydrate 6153-56-6	= 375 mg/kg (Rat)	= 20000 mg/kg (Rat)	Not Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Oxalic acid, dihydrate 6153-56-6	Not Established	Not Established	Not Established	Not Established

Chronic toxicity May cause adverse kidney effects.

ATEmix (oral)	3750
ATEmix (dermal)	11000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 90 % 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)
Oxalic acid, dihydrate 6153-56-6	Not Established	4000: 24 h Lepomis macrochirus mg/L LC50 static	125 - 150: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Oxalic acid, dihydrate 6153-56-6	-0.81

13. DISPOSAL CONSIDERATIONS

Disposal Methods Should not be released into the environment. Dispose of contents/containers in accordance with local regulations.

Contaminated packaging Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Oxalic acid, dihydrate 6153-56-6	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Oxalic acid, dihydrate 6153-56-6	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Oxalic acid, dihydrate 6153-56-6	-

14. TRANSPORT INFORMATION

DOT

Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N. O. S. (10% Oxalic acid dihydrate)
UN-No 3265
Hazard Class 8
Packing group II

IATA

Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N. O. S. (10% Oxalic acid dihydrate)
UN-No 3265
Hazard Class 8
Packing group II

IMDG/IMO

Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N. O. S. (10% Oxalic acid dihydrate)
UN-No 3265
Hazard Class 8
Packing group II

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Does not comply
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 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

Chemical name	SARA 313 - Threshold Values %
Oxalic acid, dihydrate 6153-56-6	Not Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as 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
Oxalic acid, dihydrate 6153-56-6	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
Oxalic acid, dihydrate 6153-56-6	-	Not Established	-

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

Chemical name	California Proposition 65
Oxalic acid, dihydrate 6153-56-6	Not Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Oxalic acid, dihydrate 6153-56-6	X	X	X

16. OTHER INFORMATION

NFPA **Health hazard** 3 **Flammability** 1 **Instability** 0 **Physical and Chemical Hazards** N/A

HMIS **Health hazard** 4 **Flammability** 1 **Stability** 1

Prepared by Regulatory Affairs Department
Issuing Date May-20-2015
Revision Date Jun-09-2015
Reason for revision Update to Format

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

Safety Data Sheet

Issuing Date Jun-10-2015 **Revision Number** 0

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

Product identifier

Product name **SILICA REAGENT 1**

Other means of identification

Product Code(s) **V-4466**

UN-No 1789

Recommended use of the chemical and restrictions on use

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

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

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3

EMERGENCY OVERVIEW

DANGER Poison

Hazard statements

Harmful if swallowed. Harmful if inhaled. Causes severe skin burns and eye damage. May cause respiratory irritation. May cause drowsiness or dizziness.

Appearance Clear, colorless **Physical state** liquid **Odor** pungent

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective

gloves/protective clothing/eye protection/face protection.

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.
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
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell, Rinse mouth, IF SWALLOWED, Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Hydrochloric acid	7647-01-0	20

4. FIRST AID MEASURES

First Aid Measures

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Call a physician immediately.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. Call a physician immediately.

Ingestion Do NOT induce vomiting. Call a physician immediately. Drink plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protection recommended in Section 8.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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 Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing.

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 Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. 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. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product. Avoid contact with skin, eyes or clothing. 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 at room temperature. Keep away from direct sunlight. Store away from incompatible materials. Keep out of the reach of children. Keep away from incompatible materials such as cyanides or sulfides. Store away from strong bases or metals. Do not store near combustible materials.

Incompatible Products Strong bases. Metals. Strong reducing agents. Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrochloric acid 7647-01-0	Ceiling: 2 ppm	Ceiling 5 ppm (7mg/m³)	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m³

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). If splashes are likely to occur:. Face protection shield.

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

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid
Appearance Clear, colorless **Odor** pungent

Property	Values	Remarks • Method
pH	<1	No information available
Melting point / freezing point	No information available	
Boiling point / boiling range	ca 101 °C / 214 °F	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	.	Not Applicable
Flammability Limit in Air		
Upper flammability limit:	.	
Lower flammability limit:	.	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	Soluble in water	
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

Stability	Stable under recommended storage conditions.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Direct sunlight. Incompatible Products.
Incompatible materials	Strong bases. Metals. Strong reducing agents. Alkalis.
Hazardous decomposition products	Chlorine gas. Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid 7647-01-0	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Hydrochloric acid 7647-01-0	Not Established	Group 3	Not Established	Not Established

IARC (International Agency for Research on Cancer)
Group 3 - Not classifiable as to its carcinogenicity to humans

ATEmix (oral)	1190
ATEmix (dermal)	25050 mg/kg
ATEmix (inhalation-dust/mist)	2.5 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 80 % 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)
Hydrochloric acid 7647-01-0	Not Established	282: 96 h Gambusia affinis mg/L LC50 static	Not Established

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Hydrochloric acid 7647-01-0	Not Established

13. DISPOSAL CONSIDERATIONS

Disposal Methods Dispose of contents/containers in accordance with local regulations. Dispose according to federal, state, and local regulations. If permitted, neutralize reagent with sodium bicarbonate/sodium carbonate, add slurry to large volume of water to dilute, rinse to drain with excess water.

Contaminated packaging Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Hydrochloric acid 7647-01-0	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Hydrochloric acid 7647-01-0	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Hydrochloric acid 7647-01-0	-

14. TRANSPORT INFORMATION

DOT

Proper shipping name HYDROCHLORIC ACID SOLUTION
UN-No 1789
Hazard Class 8
Packing group II
Reportable Quantity (RQ) 5000

IATA

Proper shipping name HYDROCHLORIC ACID SOLUTION
UN-No 1789
Hazard Class 8
Packing group II

IMDG/IMO

Proper shipping name HYDROCHLORIC ACID SOLUTION

UN-No	1789
Hazard Class	8
Packing group	II

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
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
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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 %
Hydrochloric acid 7647-01-0	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	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
Hydrochloric acid 7647-01-0	5000 lb	Not Established	Not Established	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Hydrochloric acid 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

Chemical name	California Proposition 65
Hydrochloric acid 7647-01-0	Not Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Hydrochloric acid 7647-01-0	X	X	X

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

Chemical name	CPSC (Consumer Product Safety Commission) - Specially Regulated Substances
Hydrochloric acid 7647-01-0	Add POISON to label, 16 CFR 1500.129 (>=10%, free or chemically unneutralized)

16. OTHER INFORMATION

NFPA **Health hazard** 3 **Flammability** 0 **Instability** 0 **Physical and Chemical Hazards** N/A

HMIS **Health hazard** 3 **Flammability** 0 **Stability** 2

Issuing Date Jun-10-2015
Revision Date Jun-10-2015
Reason for revision New US GHS format

Disclaimer

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End of Material Safety Data Sheet