

Safety Data Sheet

OSHA format Revision Number 0

Issuing Date Jun-30-2015 **Revision Date** Dec-14-2016

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

Product identifier

Product name SILICA 1

Other means of identification

 Product Code(s)
 4571

 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 numbers

(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	
Specific target organ toxicity (single exposure)	Category 3	

EMERGENCY OVERVIEW

DANGER POISON

Hazard statements

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

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. Use only outdoors or in a well-ventilated area.

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. Call a poison center or doctor/physician if you feel unwell.

IF SWALLOWED:. Rinse mouth. Do NOT induce vomiting.

Storage:

Store locked up. Keep container tightly closed and in a well-ventilated place.

Disposal:

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

Other Hazards

May be harmful if swallowed.

2	COMPOSITION/INFORMATION ON	INCDEDIENTS*

Chemical name	CAS#	Weight-%
Hydrochloric acid	7647-01-0	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 contactIF 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. Excess acid on skin can be neutralized with

a 2% solution of sodium bicarbonate in water. 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. Drink

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. FIREFIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO₂, water spray or alcohol-resistant foam.

Specific hazards arising from the chemical

Contact with most metals causes the formation of explosive and flammable hydrogen gas.

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 protective equipment. See section 8. Avoid

contact with skin, eyes, and inhalation of vapors.

Environmental precautionsSee Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containmentContain and collect spillage with non-combustible absorbent material, (e.g. sand, earth,

diatomaceous earth, vermiculite) and place in container for disposal according to local /

national regulations (see Section 13).

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.

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.

Incompatible Products Strong bases. Metals. Amines. Cyanides. Sulfides. Formaldehyde.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrochloric acid	Ceiling: 2 ppm	Ceiling 5 ppm (7mg/m³)	IDLH: 50 ppm
7647-01-0			Ceiling: 5 ppm
			Ceiling: 7 mg/m ³

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. Neoprene gloves. Rubber gloves.

Respiratory protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

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

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH <

Melting point / freezing point

No information available
ca 101 °C / 214 °F

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:

Vapor pressure

Vapor density

No information available
No information available
No information available

Specific gravity 1 (water = 1)
Water solubility Soluble

Solubility in other solvents No information available **Partition coefficient** No information available **Autoignition temperature** No information available **Decomposition temperature** No information available No information available Kinematic viscosity No information available **Dynamic viscosity** No information available **Explosive properties** No information available **Oxidizing properties**

Other Information

Revision Date

Dec-14-2016

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

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use and storage.

Hazardous Reactions

Thermal oxidative decomposition produces toxic chlorine gas and flammable hydrogen gas.

May react with metals to produce flammable hydrogen gas.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Excessive heat. Incompatible products. Direct sunlight.

Incompatible materials Strong bases. Metals. Amines. Cyanides. Sulfides. Formaldehyde.

Hazardous decomposition products Chlorine gas. Hydrogen gas. Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component identification

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

Information on toxicological effects

CarcinogenicityHydrochloric acid is classified by IARC as Group 3 - not classifiable as to its carcinogenicity to humans.

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

Chronic toxicity Chronic exposure to corrosive mists or vapors may cause erosion of the teeth. Prolonged

contact causes serious tissue damage.

 ATEmix (oral)
 2,380.00 mg/kg

 ATEmix (dermal)
 50,100.00 mg/kg

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Hydrochloric acid	Not Established	282: 96 h Gambusia affinis mg/L	Not Established
7647-01-0		LC50 static	

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

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

13. DISPOSAL CONSIDERATIONS

Disposal Methods 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	Not Established	-	Not Established	Not Established
7647-01-0				

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

UN-No 1789
Hazard Class 8
Packing group II
Reportable Quantity (RQ) 5000

<u>IATA</u>

UN-No 1789

Proper shipping name HYDROCHLORIC ACID

Hazard Class 8
Packing group | |

IMDG/IMO

UN-No 1789

Proper shipping name HYDROCHLORIC ACID

Hazard Class 8
Packing group ||

UN-No 1789

Proper shipping name HYDROCHLORIC ACID

Hazard Class 8
Packing group II

<u>ADR</u>

UN-No 1789

Proper shipping name HYDROCHLORIC ACID

Hazard Class 8
Packing group ||

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

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 %	
Hydrochloric acid	1.0	
7647-01-0		
CADA 244/242 Harrard Cotomorico		

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	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous
	Quantities		-	Substances
Hydrochloric acid	5000 lb	Not Established	Not Established	X
7647-01-0				

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	5000 lb	5000 lb	RQ 5000 lb final RQ
7647-01-0			RQ 2270 kg final RQ

US State Regulations

This product does not contain any Proposition 65 chemicals.

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	X	X	X
7647-01-0			

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	
16. OTHER INFORMATION		

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

Health hazard 3 Flammability 1

Health hazard 3 Flammability 1

Health Hazard 3 Flammability 1

Prepared by Issuing Date Revision Date Reason for revision

Reactivity

1

Regulatory Affairs Department

Jun-30-2015 Dec-14-2016

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 Safety Data Sheet