SAFETY DATA SHEET

Revision Date 10-Apr-2023 Version 2

1. Identification

Product identifier

Product Name Muriatic Acid

Other means of identification

Product Code 26457037371

UN/ID no 1789
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Swimming pool chemicals. Cleaning agent

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address

KIK International LLC 1725 North Brown Road Lawrenceville, GA 30043 1-800-479-6603

Emergency telephone number

Emergency Telephone Chemtrec (Transportation) 1-800-424-9300, 703-527-3887

Poison Control Center (Medical): (877) 800-5553

2. Hazard(s) identification

Classification

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
Corrosive to metals	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Harmful if swallowed

Causes severe skin burns and eye damage

Harmful if inhaled

May cause respiratory irritation. May cause drowsiness or dizziness

May be corrosive to metals



Appearance Slightly yellow liquid

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 breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/clothing and eye/face protection

Keep only in original packaging

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting. Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store in corrosive resistant/ plastic container with a resistant inner liner.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

No information available.

3. Composition/information on ingredients

Mixture

Chemical name	CAS No	Weight-%	Trade Secret
Hydrogen chloride	7647-01-0	25-35	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. If

symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing mediaDo not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Pick up and transfer to properly labeled containers.

7. Handling and storage

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Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Do not mix with

other chemicals.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

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

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992).

Appropriate engineering controls

Engineering controls 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 and protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance Slightly yellow liquid

Color amber; colorless to light amber

Odor Pungent

Odor threshold No information available

Property Values Remarks • Method

pH < 1

Melting point / freezing pointNo data availableNone knownBoiling point / boiling rangeNo data availableNone knownFlash pointNo data availableNone knownEvaporation rateNo data availableNone known

None known

Flammability (solid, gas) No data available None known

Flammability Limit in Air

Upper flammability limit:

Lower flammability limit:

No data available

No data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone known

Relative density
Water solubility
No data available
No data available
No data available
No data available

Solubility(ies) No data available None known
Partition coefficient No data available None known
Autoignition temperature No data available None known
Decomposition temperature
None known
None known
None known

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Other information

Explosive properties
Oxidizing properties
No information available
Density
No information available
No information available

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materials Strong oxidizing agents. Bases. Metals.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Inhalation May be harmful if inhaled. May cause central nervous system depression with nausea,

headache, dizziness, vomiting, and incoordination. May cause irritation of respiratory tract.

Eye contact Avoid contact with eyes. Causes serious eye damage. May cause burns.

Skin contact Avoid contact with skin and clothing. May cause burns.

Ingestion May be fatal if swallowed. Can burn mouth, throat, and stomach. Ingestion causes burns of

the upper digestive and respiratory tracts.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

No information available

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

ATEmix (oral) 756.00 mg/kg
ATEmix (dermal) 15,920.67 mg/kg
ATEmix (inhalation-gas) 1,788.26 ppm
ATEmix (inhalation-dust/mist) 1.59 mg/l

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

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Hydrogen chloride	-	Group 3	-	X
7647-01-0				

Reproductive toxicityNo information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Target organ effects Eyes, Respiratory system, Skin.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

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Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Contaminated packaging

Waste from residues/unused

Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

products

Do not reuse empty containers. Dispose of in accordance with federal, state and local

regulations.

14. Transport information

DOT

UN/ID no 1789

Proper shipping name HYDROCHLORIC ACID SOLUTION

Transport hazard class(es)

Packing Group

Description UN1789 HYDROCHLORIC ACID SOLUTION, 8, II

IATA

UN number or ID number 1789

HYDROCHLORIC ACID SOLUTION Proper shipping name

Transport hazard class(es)

Packing group Ш

Description UN1789 HYDROCHLORIC ACID SOLUTION, 8, II

IMDG

UN number or ID number 1789

Proper shipping name HYDROCHLORIC ACID SOLUTION

Transport hazard class(es)

Packing Group

Description UN1789 HYDROCHLORIC ACID SOLUTION, 8, II

15. Regulatory information

International Inventories

TSCA Complies. **DSL/NDSL** Complies.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

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	е	SARA 313 - Threshold Values %
Hydrogen chloride - 76	647-01-0	1.0

'

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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
Hydrogen chloride 7647-01-0	5000 lb	-	-	Х

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	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Ī	Hydrogen chloride 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Hydrogen chloride	X	X	X
7647-01-0			

U.S. EPA Label Information

EPA Pesticide Registration Number This product does not contain any substances regulated as pesticides

Difference between SDS and CPSC label

This product is regulated under Consumer Product Safety Commission and is subject to certain labeling requirements under the Federal Hazardous Substances Act (16 CFR Part 1500). These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace product labels.

16. Other information

NFPA_	Health hazards 3	Flammability 0	Instability 1	Special hazards -
HMIS_	Health hazards 3	Flammability 0	Physical hazards 1	Personal protection B

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

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Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision Date 10-Apr-2023

Revision NoteNo information available.

Disclaimer

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