SITARA CHEMICAL INDUSTRIES LTD	SAFETY DATA SHEET (SDS)	
	HYDROCHLORIC ACID	
	Document #: **SCIL-SDS-04**	Issue Date: **01-Jan-23**
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1. IDENTIFICATION

1.1 Product identifier : **Hydrochloric acid**

Synonym(s) : Muriatic Acid, Hydrogen Chloride

Recommended use : Laboratory chemicals, Manufacture of substances

Restrictions on use : Not determined.

Reach No. : 01-2119484862-27-XXXX

1.2 Details of the supplier of the Safety data sheet Manufacturer

Company Name	Sitara Chemical Industries Ltd.
Address:	32-K.M, Sheikhupura Road, Faisalabad
Telephone Number:	(+92) 041-4689141-5
Emergency Number	(+92) 041-4689141-5 (Ext.1161)
Website	http://www.sitara.com.pk

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or Mixture.

Classification according to Regulation (EC) No 1272/2008

Skin corrosion	Sub-category 1B
Serious eye damage	Category 1
Corrosive to Metals	(Category 1)

Specific target organ toxicity - single exposure (Category 3)

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label Elements

Labeling according Regulation (EC) No 1272/2008

Pictogram 

Signal word Danger

Hazard statement(s)

Causes severe skin burns and eye damage.

May be corrosive to metals

May cause respiratory irritation

Precautionary statement(s)

Keep only in original packaging.

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

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:

This substance/mixture contains no components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Formula : NaOCl

Molecular weight : 74.44 g/mol

Hydrochloric acid			
Component		**Classification**	**Concentration**
EC-No. Index-No. Registration number	231-595-7 017-002-01-X 01-2119484862-27-XXX	1B; Eye Dam. 1; STOT SE 3; H290, H314, H318, H335 Concentration limits: >= 0.1 %: Met. Corr. 1, H290; >= 25 %: Skin Corr. 1B, H314; 10 - < 25 %: Skin Irrit. 2, H315; 10 - < 25 %: Eye Irrit. 2 H319; >= 10 %: STOT SE3, H335;	>= 30 - < 50

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first-aid measures

General advice: First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled: After inhalation move to fresh air. Call in physician.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact:

Rinse out with plenty of water. Remove contact lenses. Immediately call in ophthalmologist

If swallowed: Make victim drink water, avoid vomiting (risk of perforation). Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and environment.

Unsuitable extinguishing media: For this substance no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas.

Hydrogen chloride gas Not combustible

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures.

6.2 Environmental precautions. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Cover drains. Observe possible material restrictions. Dispose of properly. Clean up affected area.

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

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Storage conditions : **No metal container** Tightly closed.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.1 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Ingredients with workplace control parameters.

8.2 Exposure controls
Personal protective equipment
Eye/face protection: Use equipment for eye protection
Skin protection: Chemical resistant gloves
Body Protection: protective clothing
Respiratory protection: Required when vapors are generated.
Other: Wear suitable protective clothing.
Control of environmental exposure: Do not let product enter drains.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Appearance
Physical state

Form:	Liquid
Color:	Light yellow
Odor:	Pungent
pH:	< 1 at 20 °C
Melting point/freezing point:	-30 °C
Initial boiling point and boiling range:	> 100 °C
Flash Point:	Not applicable
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Vapor pressure:	227 hPa at 21,1 °C
Vapor density:	No data available

	Density:	1.160 g/mL at 25 °C
	Relative density:	No data available
	Solubility in water:	Completely miscible at 20 °C.
	Partition coefficient (n-octanol/water):	No data available
	Auto-ignition temperature:	Not applicable
	Decomposition temperature:	No data available.
	Viscosity: Viscosity, kinematic / dynamic	No data available
	Explosive properties	Not classified as explosive
	Oxidizing properties	No data available
9.2	**Other safety information:**	No data available

10. Chemical Stability & Reactivity Information

10.1 **Reactivity:** No data available

10.2 **Chemical Stability:** The product is chemically stable under standard ambient conditions.

10.3 **Possibility of hazardous reactions:** No data available

10.4 **Conditions to avoid:** It reacts violently with strong basa.

10.5 **Incompatible Materials:**

Bases, Amines, Alkali metals, Metals, permanganates, for example potassium permanganate, Fluorine, metal acetylides, hexalithium disilicideMetals

10.6 **Hazardous Decomposition Products:** In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 **Information on toxicological effects**

Mixture

Acute toxicity: Oral: No data available

Symptoms:

If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Skin corrosion/irritation: Mixture causes burns

Serious eye damage/eye irritation: Mixture causes serious eye damage. Risk of blindness.

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: Mixture may cause respiratory irritation

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

11.2 **Additional Information**

RTECS: MW4025000

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Product:

Components

Hydrochloric Acid

Acute toxicity:

Oral: No data available

Inhalation: Cough Difficulty in breathing
LD50 Dermal - Rabbit - male and female - > 20.000 mg/kg
(OECD Test Guideline 402).
Symptoms: Cough, Mucosal irritations, Shortness of breath, Inhalation may lead to the formation of oedemas in the respiratory tract. Possible damages of respiratory tract, tissue damage.
Dermal No data available
Skin corrosion/irritation:
Skin - reconstructed human epidermis (RhE)
Result: Corrosive
Serious eye damage/eye irritation: Eyes - Bovine cornea.
Respiratory or skin sensitization:
Maximization Test - Guinea pig
Result: negative
(OECD Test Guideline 406)
Germ cell mutagenicity:
Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Result: Conflicting results have been seen in different studies
Carcinogenicity:
Did not show carcinogenic effects in animal experiments. (IUCLID)
Reproductive toxicity: No data available
Specific target organ toxicity - single exposure: May cause respiratory irritation.
The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.
Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath,
Inhalation may lead to the formation of oedemas in the respiratory tract., Possible damage of respiratory tract, tissue damage
Specific target organ toxicity - repeated exposure:
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard
No aspiration toxicity classification

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Mixture: No data available
12.2 Persistence and degradability No data available
12.3 Bio accumulative potential: No data available
12.4 Mobility in soil: No data available
12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.
12.6 Other adverse effects No data available
Components
Hydrochloric Acid No data available
Toxicity to fish: LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h
Remarks: (IUCLID)

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1789 IMDG: 1789 IATA: 1789

14.2 UN proper shipping name

ADR/RID: Hydrochloric acid

IMDG: Hydrochloric acid

IATA: Hydrochloric acid

14.3 Transport hazard class (es)

ADR/RID: 8 IMDG: 8 IATA: 8

14.4 Packaging group

ADR/RID: III IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: No IMDG Marine pollutant: No IATA: No

14.6 Special precautions for user: No data available

15. REGULATORY INFORMATION

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

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

15.2 Chemical Safety Assessment: A Chemical Safety Assessment was not carried out for this substance.

16. LABELING INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Causes severe skin burns and eye damage.
Causes skin irritation.
Causes serious eye damage.
Causes serious eye irritation.
May cause respiratory irritation.
May be corrosive to metals.

Disclaimer:

All information given in this data sheet by the company's technical staff is compiled based on data available at this time. The company accepts no responsibility whatsoever for its accuracy or for any results which may be obtained by customers. Any customer who relies upon any advice or information given in this data sheet by the company or by its technical staff does so entirely at its own risk and the company will not be liable for any loss or damage thereby suffered notwithstanding any want of care on the part of the company or its staff in compiling or giving the advice or information.