

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name 0.1M-HCL
Product Description 0.1M Hydrochloric Acid

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

Recommended Use Laboratory chemicals
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company

Inorganic Ventures
300 Technology Drive
Christiansburg, VA 24073
web: www.inorganicventures.com

E-mail Address info@inorganicventures.com

1.4. Emergency telephone number

Chemtrec 1-800-424-9300 (North America)
Chemtrec +1 703-741-5970 (International)

Europe	See above
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

GHS

2.2. Label Elements

Product identifier

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Signal word

None

2.3. Other information

No information available

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No
Hydrochloric acid	EEC No. Present	7647-01-0	0.8333	Acute Tox. 3 (H331) Skin Corr. 1A (H314) STOT SE 3 (H335)	No data available

Full text of H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects	Asthma-like and/ or skin allergy-like symptoms.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically
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SECTION 5: Firefighting 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

Thermal decomposition can lead to release of irritating gases and vapors

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions

Ensure adequate ventilation.

Advice for emergency responders

Ensure adequate ventilation.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological Information.

6.3. 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 Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

SECTION 7: Handling and storage

7.1. Precautions for Safe Handling

Advice on safe handling

Ensure adequate ventilation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	EU	United Kingdom	France	Spain	Germany	
Hydrochloric acid 7647-01-0		TWA: 1 ppm TWA: 2 mg/m³ STEL: 5 ppm STEL: 8 mg/m³	VLCT: 7.6 mg/m³ VLTC: 5 ppm	STEL: 10 ppm STEL: 15 mg/m³ TWA: 5 ppm TWA: 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	TWA: 5 ppm TWA: 8 mg/m³	STEL: 10 ppm STEL: 15 mg/m³ Ceiling: 2 ppm TWA: 5 ppm TWA: 8 mg/m³	STEL: 15 mg/m³ TWA: 8 mg/m³	STEL: 7.6 mg/m³ STEL: 5 ppm	Ceiling: 7 mg/m³ Ceiling: 5 ppm	
Chemical name	Sweden	Austria	Switzerland	Poland	Norway	Ireland
Hydrochloric acid 7647-01-0	LLV: 2 ppm LLV: 3 mg/m³ Binding STL: 4 ppm Binding STL: 6 mg/m³	STEL 10 ppm STEL 15 mg/m³ TWA: 5 ppm TWA: 8 mg/m³	STEL: 4 ppm STEL: 6 mg/m³ TWA: 2 ppm TWA: 3 mg/m³	NDSch: 10mg/m³ NDS: 5mg/m³	Ceiling: 5 ppm Ceiling 7 mg/m³	TWA: 8 mg/m³ TWA: 5 ppm STEL: 10 ppm STEL: 15 mg/m³

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	Impervious gloves.
Skin and Body Protection	Long sleeved clothing.
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

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	clear / colorless
Odor	Odorless
<u>Property</u>	<u>Values</u>
pH - VALUE 1	No data available
Melting point / melting range	No data available
Boiling point / boiling range	100 °C
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapor pressure @20 °C (kPa)	No data available
Vapor density	No data available
Relative Density	No data available
Specific gravity - VALUE 1	No data available
Water solubility	Miscible
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Dynamic viscosity - VALUE 1	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available
<u>Other information</u>	
VOC Content (%)	No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical Stability

Stable under normal conditions.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

10.3. Possibility of Hazardous Reactions

Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions

None under normal processing.

10.4. Conditions to Avoid

None known.

10.5. Incompatible materials

Reducing agent

10.6. Hazardous Decomposition Products

Hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

<u>Product Information</u>	Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation	No data available.
Eye Contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

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

mg/kg ppm

ATEmix (inhalation-dust/mist) 60.10 mg/l

Unknown acute toxicity

- 0 % of the mixture consists of ingredient(s) of unknown toxicity.
- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

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

Contains 0 % of components with unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Hydrochloric acid		282: 96 h Gambusia affinis mg/L LC50 static	

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from Residues/Unused Products

Dispose of in accordance with federal, state and local regulations.

Contaminated Packaging

Do not reuse empty containers.

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG

14.1. UN-No

UN3264

14.2. Proper shipping name

Corrosive liquid, acidic, inorganic, n.o.s

14.3. Transport hazard class(es)

8

14.4. Packing Group

III

Description

Not applicable

14.5. Marine Pollutant

None

14.6. Special Provisions

None

No information available Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

RID

14.1. UN-No

UN3264

14.2. Proper shipping name

Corrosive liquid, acidic, inorganic, n.o.s

14.3. Hazard Class

8

14.4. Packing Group

III

Description

Not applicable

14.5. Environmental hazard

None

14.6. Special Provisions None

ADR

14.1. UN-No UN3264
 14.2. Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s
 14.3. Hazard Class 8
 14.4. Packing Group III
 Description Not applicable
 14.5. Environmental hazard None
 14.6. Special Provisions None

ICAO

14.1. UN-No UN3264
 14.2. Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s
 14.3. Hazard Class 8
 14.4. Packing Group III
 Description Not applicable
 14.5. Environmental hazard None
 14.6. Special Provisions None

IATA-DGR

14.1. UN-No UN3264
 14.2. Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s
 14.3. Transport hazard class(es) 8
 14.4. Packing Group III
 Description Not applicable
 14.5. Environmental hazard None
 14.6. Special Provisions None

SECTION 15: Regulatory information

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

All of the components in the product are on the following Inventory lists: U.S.A. (TSCA), Europe (EINECS/ELINCS/NLP), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), China (IECSC), Australia (AICS), Korea (ECL).

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

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No information available

SECTION 16: Other information**Full text of R-phrases referred to under sections 2 and 3**

R34 - Causes burns

R35 - Causes severe burns

R23 - Toxic by inhalation

R37 - Irritating to respiratory system

Full text of H-Statements referred to under section 3

H314 - Causes severe skin burns and eye damage

H331 - Toxic if inhaled

H335 - May cause respiratory irritation

Revision Date 06-Sep-2023**Reason for Revision** Not applicable.**This material 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