

# **SECTION 1: Identification**

# 1.1. Product Identifier

Trade Name or Designation: Hydrochloric Acid, 10% v/v

Approximately 1.2 Normal (1.2 Molar)

Product Number: TH101200

Other Identifying Product Numbers: C748C82, C748C83

## 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

## 1.3. Details of the Supplier of the Safety Data Sheet

Company: Thomas Scientific

Address: 1654 High Hill Road Swedesboro, NJ 08085 USA Telephone: 800-345-2100

# 1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1+ 703-527-3887

# SECTION 2: Hazard(s) Identification

## 2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

	Hazard		
Hazard Class	Category	Statement	Precautionary Statements
Skin Corrosion / Irritation	Category 1	H314	P260, P264, P280, P301+P330+P331,
			P303+P361+P353, P363, P304+P340, P310,
			P321, P305+P351+P338, P405, P501
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310

# 2.2. GHS Label Elements

# Pictograms:





# Signal Word: Danger

## Hazard Statements:

Hazard Number	Hazard Statement
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

## Precautionary Statements:

Precautionary Number	Precautionary Statement
P260	Do not breathe dust, fumes or mist.
P264	Wash arms, hands and face thoroughly after handling.
P280	Wear protective gloves and eye protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
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 physician.
P363	Wash contaminated clothing before reuse.

## 2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

## 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

# SECTION 3: Composition / Information on Ingredients

## 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H <sub>2</sub> O	18.01 g/mol	7732-18-5	95.71%
Hydrochloric Acid	HCI	36.46 g/mol	7647-01-0	4.29%

# **SECTION 4: First-Aid Measures**

## 4.1. General First Aid Information

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.



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

Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

## 4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause mild irritation to areas of contact.

### 4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician.

# **SECTION 5: Fire-Fighting Measures**

## 5.1. Extinguishing Media

Not considered to be a fire or explosion hazard.

## 5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

### 5.3. Special Protective Equipment for Firefighters

Wear protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

## **SECTION 6: Accidental Release Measures**

# 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

#### 6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

# **SECTION 7: Handling and Storage**

## 7.1. Precautions for Safe Handling and Storage Conditions

Protect from freezing and physical damage.

# **SECTION 8: Exposure Controls / Personal Protection**

#### 8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Hydrochloric Acid (7647-01-0)	TLV-Ceiling	USA	2 ppm Ceiling	ACGIH - Threshold Limit Values - Ceilings
				(TLV-C)
Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	5 ppm Ceiling 7 mg/m³ Ceiling	U.S OSHA - Final PELs - Ceiling Limits

## 8.2. Exposure Controls

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.



Respiratory Protection: No specific controls are needed. Normal room ventilation is adequate

Skin Protection: Wear protective gloves and eye protection.

Eye Protection: Wear protective gloves and eye protection.

# 8.3. Personal Protective Equipment

Wear protective gloves and eye protection.

# **SECTION 9: Physical and Chemical Properties**

## 9.1. Basic Physical and Chemical Properties

Appearance:	Colorless
Physical State:	Liquid
Odor:	Pungent
Odor Threshold:	0.3 - 5 Ppm Hydrogen Chloride
pH:	< 1
Melting/Freezing Point:	Approximately 0°C
Initial Boiling Point /Range:	Approximately 100°C -
Flash Point:	Not applicable
Evaporation Rate:	Data not available
Flammability:	Not flammable
Flammability/Explosive Limits:	Data not available.
Vapor Pressure:	1.95 kPa @20°C
Vapor Density:	Data not available
Relative Density:	1.02
Solubility:	Miscible
Partition Coefficient (n-Octanol/Water):	Data not available
Auto-Ignition Temperature:	Not applicable
Decomposition Temperature:	Data not available
Viscosity:	1.16 mPa.s
ExplosiveProperties:	Data not available.
Oxidizing Properties:	Data not available.

# **SECTION 10: Stability and Reactivity**

## 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.



**10.2. Possibility of Hazardous Reactions** 

Data not available.

### 10.3. Conditions to Avoid and Incompatible Materials

Protect from freezing and physical damage.

#### **10.4. Hazardous Decomposition Products**

May emit irritating fumes when heated to decomposition.

# **SECTION 11: Toxicological Information**

### 11.1. Information on Toxicological Effects

#### Acute Toxicity - Oral Exposure:

Not applicable.

#### Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

#### Acute Toxicity - Other Information:

Data not available.

## Skin Corrosion and Irritation:

Causes severe skin burns and eye damage. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Wear protective gloves vomiting. and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce IF ON SKIN (or hair): Take off immediately all Wash contaminated clothing before IF INHALED: contaminated clothing. Rinse skin with water. reuse. Remove person to fresh air and keep a POISON CENTER comfortable for breathing. Immediately call or physician. Specific treatment (Wash areas of contact with water). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. 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 physician.

## **Respiratory Sensitization:**

Not applicable.

#### Skin Sensitization:

Not applicable.

#### Germ Cell Mutagenicity:

Not applicable.

## Carcinogenicity:

Not applicable.



**Reproductive Toxicity:** 

Not applicable.

## Specific Target Organ Toxicity from Single Exposure:

Not applicable.

### Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

#### **Aspiration Hazard:**

Not applicable.

#### Additional Toxicology Information:

Data not available.

# **SECTION 12: Ecological Information**

# 12.1. Ecotoxicity

Not applicable.

### 12.2. Persistence and Degradability

Data not available.

#### 12.3. Bioaccumulative Potential

Data not available.

## 12.4. Mobility in Soil

Data not available.

# 12.5. Other Adverse Ecological Effects

Data not available.

# **SECTION 13: Disposal Considerations**

# 13.1. Waste Treatment Methods

Data not available.



# **SECTION 14: Transportation Information**

14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

UN Number:	UN1789
Proper Shipping Name:	Hydrochloric Acid Solution
Hazard Class:	8
Packing Group:	III
Hazard Placard Labels:	CORROSIVE 8

## 14.2. Transportation by Air - International Air Transport Association (IATA)

UN Number:	UN1789
Proper Shipping Name:	Hydrochloric Acid Solution
Hazard Class:	8
Packing Group:	III
Hazard Placard Labels:	CORROSIVE 8

# **SECTION 15: Regulatory Information**

15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Hydrochloric Acid (CAS # 7647-01-0): 500 lb TPQ (gas only) Hydrochloric Acid (CAS # 7647-01-0): 5000 lb EPCRA RQ (gas only)

# 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Hydrochloric Acid (CAS # 7647-01-0): 5000 lb final RQ; 2270 kg final RQ

#### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Hydrochloric Acid (CAS # 7647-01-0): 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

# 15.5. Massachusetts Right-to-Know Substance List

Hydrochloric Acid (CAS # 7647-01-0): Extraordinarily hazardous



# 15.6. Pennsylvania Right-to-Know Hazardous Substances

Hydrochloric Acid (CAS # 7647-01-0): Environmental hazard Hydrochloric Acid (CAS # 7647-01-0): Present Water (CAS # 7732-18-5): Present

### 15.7. New Jersey Worker and Community Right-to-Know Components

Hydrochloric Acid (CAS # 7647-01-0): corrosive

Hydrochloric Acid (CAS # 7647-01-0): sn 1012

Hydrochloric Acid (CAS # 7647-01-0): SN 1012 TPQ: 500 lb (>=37% concentration); SN 2909 TPQ: 500 lb (Hydrogen chloride gas only. NJ uses UN1050 for reporting purposes)

## 15.8. California Proposition 65

Not listed.

# 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Hydrochloric Acid (CAS # 7647-01-0): Present Water (CAS # 7732-18-5): Present

## 15.10. United States of America Toxic Substances Control Act (TSCA) List

Hydrochloric Acid (CAS # 7647-01-0): Present [T] Water (CAS # 7732-18-5): Present

## 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS),

## European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

# **SECTION 16: Other Information**

# 16.1. Full Text of Hazard Statements and Precautionary Statements

Causes severe skin burns and eye damage. Causes serious eye damage.

Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection.

IF SWALLOWED: rinse Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated mouth. clothing. Rinse skin with IF water. INHALED: Remove person to fresh air and keep comfortable for breathing. 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 physician. Specific treatment (Wash areas of contact with water). Wash contaminated clothing before reuse.

Store locked up.

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

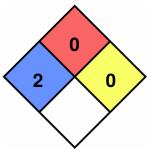


## 16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class:	Not Applicable.
Physical Hazards Not Otherwise Classified (PHNOC):	Not Applicable.
Health Hazards Not Otherwise Classified (HHNOC):	Not Applicable.
Biohazardous Infectious Materials Hazard Class:	Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating





#### 16.4. Document Revision

Last Revision Date: 5/16/2019

# DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and THOMAS SCIENTIFIC assumes no legal responsibility or liability whatsoever resulting from its use.