SAFETY DATA SHEET

1. Identification

Product identifier: - HYDROCHLORIC ACID 31%

Other means of identification

Synonyms: HCL **CAS NUMBERS:** 7647-01-0 SDS number: 000100002743

Recommended use and restriction on use

Recommended use: Reserved for industrial and professional use.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Univar

3075 Highland Pkwy STE 200

Downers Grove, IL 60515

425-889-3400

Emergency telephone number: For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Oral) Category 4

Acute toxicity (Dermal) Category 4

Skin Corrosion/Irritation Category 1A

Serious Eye Damage/Eye Irritation Category 1

Label Elements

Hazard Symbol

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Signal Word Danger

Hazard Statement Causes severe skin burns and eye damage.

Harmful if swallowed or in contact with skin.

Precautionary Statements

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

Wash thoroughly after handling. Do not eat, drink or smoke when using

this product. Do not breathe dust or mists.

Response IF 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. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment (see this label). Wash

contaminated clothing before reuse.

Storage Store locked up.

Disposal Dispose of contents/container to an appropriate treatment and disposal

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facility in accordance with applicable laws and regulations, and product $% \left(1\right) =\left(1\right) \left(1\right) \left$

characteristics at time of disposal.

Other hazards which do not result in GHS classification

None.

3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Water		7732-18-5	69%
Hydrochloric acid		7647-01-0	31%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition Comments:

The components are not hazardous or are below required disclosure

limits.

4. First-aid measures

Ingestion: Do NOT induce vomiting. Never give liquid to an unconscious person. Get

medical attention immediately.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Perform artificial

respiration if breathing has stopped. Get medical attention immediately.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Get medical attention

immediately.

Eye contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see

a doctor.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

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Suitable (and unsuitable) extinguishing media

Suitable extinguishing

Use fire-extinguishing media appropriate for surrounding materials.

media:

Unsuitable extinguishing

No data available.

media:

Specific hazards arising from the During fire, gases hazardous to health may be formed.

chemical:

Special protective equipment and precautions for firefighters

Special fire fighting

No data available.

procedures:

fire-fighters:

Special protective equipment for

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency

procedures:

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for

Absorb spillage with non-combustible, absorbent material.

containment and cleaning up: Notification Procedures:

Dike for later disposal. Prevent entry into waterways, sewer, basements or

confined areas. Stop the flow of material, if this is without risk.

Environmental Precautions:

Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after

handling. Do not taste or swallow. Do not get in eyes. Do not get in eyes,

on skin, on clothing.

Conditions for safe storage,

including any incompatibilities:

Store locked up.

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8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values		Source	
Hydrochloric acid	Ceiling	5 ppm	7 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)	
	AN ESL		8.4 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)	
	ST ESL		190 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)	
	AN ESL		5.7 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)	
	ST ESL		130 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)	
	Ceiling	5 ppm	7 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)	
	Ceiling	2 ppm		US. ACGIH Threshold Limit Values (03 2013)	
	Ceil_Tim e	5 ppm	7 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)	
	Ceiling	5 ppm	7 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	
	Ceiling	5 ppm	7 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)	
Chemical Identity	type	Exposure Limit Values		Source	
Hydrochloric acid	Ceiling	5 ppm	7 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)	
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T T			
ST ESL		190	US. Texas. Effects Screening Levels
		μg/m3	(Texas Commission on Environmental
			Quality) (02 2013)
AN ESL		5.7 ppb	US. Texas. Effects Screening Levels
			(Texas Commission on Environmental
			Quality) (02 2013)
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			Contaminants (02 2012)
Ceiling	2 ppm		US. ACGIH Threshold Limit Values (03
			2013)
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e			Hazards (2010)
Ceiling	5 ppm	7 mg/m3	US. OSHA Table Z-1 Limits for Air
			Contaminants (29 CFR 1910.1000)
			(02 2006)
Ceiling	5 ppm	7 mg/m3	US. OSHA Table Z-1-A (29 CFR
		="	1910.1000) (1989)
Ceil_Tim e Ceiling	5 ppm	7 mg/m3	2013) US. NIOSH: Pocket Guide to Chemical Hazards (2010) US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) US. OSHA Table Z-1-A (29 CFR

Appropriate Engineering

Controls

No data available.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required. Always observe good

personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Practice good housekeeping. Provide eyewash station and safety

shower.

Eye/face protection: Wear a full-face respirator, if needed. Wear safety glasses with side shields

(or goggles) and a face shield.

Skin Protection

Hand Protection: Chemical resistant gloves
Other: Chemical resistant clothing

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Respiratory Protection: In case of inadequate ventilation use suitable respirator.

Hygiene measures: Avoid contact with skin. Observe good industrial hygiene practices. Do not

eat, drink or smoke when using the product. Wash hands after handling. Do not get in eyes. Wash contaminated clothing before reuse. Do not get

this material in contact with skin. Wash hands before breaks and

immediately after handling the product.

9. Physical and chemical properties

Physical state: liquid

Form:

Color:

No data available.

pH: 2

Melting point/freezing point: -34 - -15 °C Initial boiling point and boiling range: 60 - 105 °C

Flash Point:

Evaporation rate:

No data available.

No data available.

No data available.

No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

No data available.

Vapor pressure:

Vapor density:

No data available.

No data available.

No data available.

No data available.

Solubility(ies)

Solubility in water:

Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

No data available.

No data available.

No data available.

No data available.

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Viscosity: No data available.

10. Stability and reactivity

No data available. Reactivity:

Chemical Stability: Material is stable under normal conditions. Stable

Possibility of hazardous

reactions:

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: No data available. **Hazardous Decomposition** No data available.

Products:

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available. Inhalation: No data available. **Skin Contact:** No data available. Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix (): 900 mg/kg

ATEmix (): 900 mg/kg

Dermal

Product: ATEmix (): 1,449 mg/kg

ATEmix (): 1,449 mg/kg

Inhalation

Product: No data available.

Specified substance(s):

Hydrochloric acid LC50 (Rat,): 8.3 mg/l (, No) 2 = reliable with restrictions LC50 (Rat,): 45.6

mg/I (, No) 2 = reliable with restrictions

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

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Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available. **Other effects:** No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Hydrochloric acid LC50 (Western mosquitofish (Gambusia affinis), 48 h): 282 mg/l Mortality

LC50 (Western mosquitofish (Gambusia affinis), 96 h): 282 mg/l Mortality LC50 (Western mosquitofish (Gambusia affinis), 24 h): 282 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Hydrochloric acid LC50 (Green or European shore crab (Carcinus maenas), 48 h): 240 mg/l

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Mortality LC50 (Common shrimp, sand shrimp (Crangon crangon), 48 h):

260 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.
Partition Coefficient n-octanol / water (log Kow)
Product: No data available.
Mobility in Soil: No data available.

Known or predicted distribution to environmental compartments

Water No data available. Hydrogen chloride No data available.

Known or predicted distribution to environmental compartments

Water No data available.

Known or predicted distribution to environmental compartments

Hydrogen chloride No data available.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local

laws. Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings

even after container is emptied.

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14. Transport information

DOT

UN Number: UN 1789

UN Proper Shipping Name: Hydrochloric acid solution

Transport Hazard Class(es)

Class: 8
Label(s): 8
Packing Group: II

Marine Pollutant: Not regulated.

Special precautions for user: -

IMDG

UN Number: UN 1789

UN Proper Shipping Name: HYDROCHLORIC ACID SOLUTION

Transport Hazard Class(es)

 Class:
 8

 Label(s):
 8

 EmS No.:
 F-A, S-B

Packing Group:

Marine Pollutant: Not regulated.

Special precautions for user: –

IATA

UN Number: UN 1789

Proper Shipping Name: Hydrochloric acid solution

Transport Hazard Class(es):

Class: 8
Label(s): 8
Packing Group: II

Environmental Hazards Not regulated.

Special precautions for user: —

Other information

Passenger and cargo aircraft: Allowed. Cargo aircraft only: Allowed.

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US Federal RegulationsUS. C	SHA Specifically Regulat	ed Substances (29 CFR 1910.1001-	1050)
None present or none pres	sent in regulated quantition	es.	
None present or none pres	sent in regulated quantiti	es.	
CERCLA Hazardous Substand	e List (40 CFR 302.4):		
Hydrochloric acid	Reportable quantit	•	
Hydrochloric acid	Reportable quantit	•	
Superfund Amendments and	d Reauthorization Act of	1986 (SARA)	
Hazard categories	_		
X Acute (Immediate)	Chronic (Delayed)	Fire Reactive Pressure G	enerating
SARA 302 Extremely Haz	zardous Substance		
Chemical Identity	RQ	Threshold Planning Quantity	
Hydrochloric acid	5000 lbs	. 500 lbs.	
SARA 304 Emergency Re	lease Notification		
Chemical Identity	RQ		
Hydrochloric acid	5000 lbs		
SARA 311/312 Hazardou		<u></u>	
Chemical Identity	Threshold Planning	g Quantity	
		<u> </u>	
Chemical Identity	Threshold Planning	Quantity	
Hydrochloric acid	Time Shora Tranning	500lbs	
Water		500 lbs	
SARA 313 (TRI Reporting	7)	300 103	
	5 <i>1</i>		
	Reporting		
	threshold for	Reporting threshold for	
Chemical Identity	other users	manufacturing and processing	
Hydrochloric acid	10000 lbs	25000 lbs.	
Clean Water Act Section 311	. Hazardous Substances (40 CFR 117.3)	
Hydrochloric acid	Reportable quantit	y: 5000 lbs.	
Clean Air Act (CAA) Section	112(r) Accidental Release	Prevention (40 CFR 68.130):	
Hydrochloric acid	Threshold quantity	: 15000 lbs	
Hydrochloric acid	Threshold quantity	: 5000 lbs	

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US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Hydrochloric acid Listed **US. Massachusetts RTK - Substance List**Hydrochloric acid Listed

US. Pennsylvania RTK - Hazardous Substances

Hydrochloric acid Listed

US. Rhode Island RTK

Hydrochloric acid Listed

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Inventory Status: Australia AICS: On or in compliance with the inventory On or in compliance with the inventory Canada DSL Inventory List: **EU EINECS List:** On or in compliance with the inventory Japan (ENCS) List: On or in compliance with the inventory China Inv. Existing Chemical Substances: On or in compliance with the inventory Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory Philippines PICCS: On or in compliance with the inventory US TSCA Inventory: On or in compliance with the inventory

16.Other information, including date of preparation or last revision

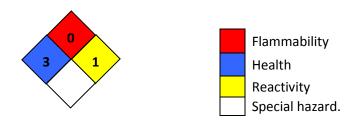
HMIS Hazard ID

Health		3
Flammability		0
Physical Hazards		1
PERSONAL PROTECTION		В

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 02/13/2017

Revision Date: No data available.

Version #: 1.2

Further Information: No data available.