

Section 1. Identification

Product identifier

Product Identity Hydrochloric Acid

Other means of identification Hydrochloric Acid

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

Acidification of petroleum wells, scale removal, ore reduction, metal cleaning, industrial acidification.

Details of the supplier of the safety data sheet

Company Name	ERCO Worldwide
Address	101 Highway 73 South Nekoosa, WI 54457 USA
Telephone	Information #: (715)- 887- 4000
Website	https://www.ercoworldwide.com/ productinfo@ercoworldwide.com
Email	
24 hour Emergency Telephone No.	Canada & U.S.A.: 1-(800) 424 9300 (CHEMTREC)
Supplier	Refer to Manufacturer

Section 2. Hazard(s) identification

Classification of the substance or mixture

Acute toxicity(inhalation), category 4;H332	Harmful if inhaled.
Skin corrosion/irritation category 1B;H314	Causes severe skin burns and eye damage.
Serious eye damage / eye irritation, category 1;H318	Causes serious eye damage.
Specific target organ toxicity, Specific exposure category 3;H335	May cause respiratory irritation.

Label elements



Danger

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

[Prevention]

P260 Do not breathe dust, fume, mist, vapours or spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves, protective clothing, eye protection, face protection.

[Response]

P303+361+353 IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.

P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338 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, doctor or physician.

P312 Call a POISON CENTER, doctor or physician if you feel unwell.

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P363 Wash contaminated clothing before reuse.

[Storage]

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]

P501 Dispose of contents or container in accordance with local and national regulations.

2.3. Other hazards

This product contains no PBT/vPvB chemicals.

This product contains no endocrine disrupting chemicals.

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the Hazardous Products Regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Hydrochloric acid CAS Number: 7647-01-0 Synonyms: Hydrochloric acid (acid aerosols including mists, vapours, gas, fog, and other airborne forms of any particle size)	10 - 30	Serious eye damage / eye irritation, category 2;H319: 10 % ≤ C < 25 % Specific target organ toxicity, Specific exposure category 3;H335: C ≥ 10 % Skin corrosion/irritation category 1B;H314: C ≥ 25 % Skin corrosion/irritation category 2;H315: 10 % ≤ C < 25 % Acute toxicity(inhalation), category 3;H331	No data available

The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
Most important symptoms and effects, both acute and delayed	
Overview	No specific symptom data available. Treat symptomatically. See section 2 for further details.
Inhalation	Harmful if inhaled. May cause respiratory irritation.
Eyes	Causes serious eye damage.
Skin	Causes severe skin burns and eye damage.

Section 5. Fire-fighting measures

Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO², powder, water spray.
Unsuitable extinguishing media: Do not use; water jet.

Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.
Do not breathe dust, fume, mist, vapours or spray.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

ERG Guide No. ---

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapours. Take the personal protective measures listed in section 8. Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.

Section 7. Handling and storage

Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

See section 2 for further details. - [Prevention]

Conditions for safe storage, including any incompatibilities

Incompatible materials: No data available.

See section 2 for further details. - [Storage]

Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

Control parameters

Exposure

CAS No.	Ingredient	Source	Value
7647-01-0	Hydrochloric acid	ACGIH	Ceiling: 2 ppm
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit

Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit, they must use the appropriate, certified respirators.
Eyes	Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.
Skin	Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapour below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid
Color	Colorless or slightly yellow, fuming
Odor	Pungent
Melting point / freezing point	For product range of concentrations: -57.22°C (-71°F) to -27°C (-17°F)
Initial boiling point and boiling range	For product range of concentrations: 107.78°C (226°F) to 53°C (127°F)
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Available Upper Explosive Limit: Not Available
Flash Point	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
pH	0.1 - 1
Viscosity (cSt)	Not Available
Solubility in Water	Solubility (water): Soluble Solubility (other): Very soluble in ethanol, methanol, dioxane and tetrahydrofuran. Insoluble in hydrocarbons (e.g. n-Hexane).
Partition coefficient n-octanol/water (Log Kow)	Not Available
Vapour pressure (Pa)	For product range of concentrations: 0.01 mmHg to 200 mmHg Vapour pressure temp.: 20°C (68°F)
Relative Density	Relative density: For product range of concentrations: 1.102 g/cm ³ to 1.188 g/cm ³ Specific gravity: 1.18
Vapour Density	1.268

Other information

No other relevant information.

Section 10. Stability and reactivity

Reactivity

Hazardous Polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

No data available.

Conditions to avoid

No data available.

Incompatible materials

No data available.

Hazardous decomposition products

No hazardous decomposition data available.

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Hydrochloric acid - (7647-01-0)	No data available.	No data available.	781.00, Mouse - Category: NA	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
7647-01-0	Hydrochloric acid	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	A4

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	4	Harmful if inhaled.



Safety Data Sheet Hydrochloric Acid

Revision Date: 03/05/2024

Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-single exposure	3	May cause respiratory irritation.
STOT-single exposure	3	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry: No data available.

Symptoms and effects, both acute and delayed:

No specific symptom data available.

Treat symptomatically.

Inhalation Harmful if inhaled. May cause respiratory irritation.

Eyes Causes serious eye damage.

Skin Causes severe skin burns and eye damage.

Section 12. Ecological information

Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Hydrochloric acid - (7647-01-0)	3.60, Lepomis macrochirus	4.92, Daphnia magna	4.82, Chlorella vulgaris

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

Not Available

Mobility in soil

No data available.

Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

Other adverse effects

No data available.

Section 13. Disposal considerations

Waste treatment methods

Waste should not be released to sewers. Observe all federal, state, and local regulations when disposing of this substance.

Section 14. Transport information

Classification Method: Classified as per Part 2, Sections 2.1 - 2.8 of the Transportation of Dangerous Goods Regulations.

	TDG (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	UN1789	UN1789	UN1789
UN proper shipping name	UN1789, Hydrochloric acid, 8, III	Hydrochloric acid	Hydrochloric acid
Transport hazard class(es)	TDG Hazard Class: 8	IMDG: 8	Air Class: 8
Packing group	III	III	III
Environmental hazards	Marine Pollutant: no ;		
Special precautions for user	Not Applicable		

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

This product has been classified in accordance with the hazard criteria Hazardous Products Regulations (SOR/2015-17) and the SDS contains all of the information required by those regulations.

Toxic Substance Control Act (TSCA)

- Hydrochloric acid ()
- Water ()

Canadian Domestic Substance List (DSL):

- Hydrochloric acid
- Water

Canadian Non-Domestic Substance List (NDSL):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



New Jersey RTK Substances (>1%):

Hydrochloric acid

Pennsylvania RTK Substances (>1%):

Hydrochloric acid

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Chemical Name (CAS Number)	US TSCA	Australia AICS	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EN NLP	Mexico INSQ
Hydrochloric acid (7647-01-0)	Yes	Yes	Yes	Yes	No	No	No	Yes

Chemical Name (CAS Number)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCL	Japan PRTR 1	Japan PRTR 2	Philippines PICCS	New Zealand NZIOC
Hydrochloric acid (7647-01-0)	Yes	Yes	Yes	Yes	No	No	Yes	Yes

Section 16. Other information

Revision Date 03/05/2024

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

End of Document



**Safety Data Sheet
Hydrochloric Acid**

Revision Date: 03/05/2024

