SAFETY DATA SHEET

Hydrochloric acid 25-36%

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

1.1. Product identifier

Trade name

Hydrochloric acid 25-36%

Other names / Synonyms

Vannholdig hydrogenklorid, 25-36% Saltsyre, Saltsyre, Saltsyreoppløsning

Product no.

316, 331, 373, 396, 1007, 1008, 1068, 1069, 1070, 1071, 1072

Unique formula identifier (UFI)

25 < 30% - YS00-P0RU-X004-SQXD, 30 < 35% - JV00-60F8-700N-F2HF

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

Relevant identified uses of the substance or mixture

Chemical semi-finished product Cleaning agent Agent for pH regulation Laboratory chemical. Acid pickling metal
Restricted to professional and industrial use.

Uses advised against

Biocide

1.3. Details of the supplier of the safety data sheet

Company and address

Acinor AS
Titangaten 13
1630 Gamle Fredrikstad
Norway
+ 47 69 38 40 82
+ 47 69 38 40 84

Contact person

-

E-mail

post@acinor.no

Revision

02/03/2026

SDS Version

1.0

1.4. Emergency telephone number

In urgent situations: Call 113 and request the poison information centre. (24h service)
Poison Center at Tel.: + 47 22 59 13 00
See section 4 on 'First Aid Measures'

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

2.1. Classification of the substance or mixture

Met. Corr. 1; H290, May be corrosive to metals.
Skin Corr. 1A; H314, Causes severe skin burns and eye damage.

Eye Dam. 1; H318, Causes serious eye damage.
STOT SE 3; H335, May cause respiratory irritation.

2.2. Label elements

Hazard pictogram(s)

Signal word

Danger

Hazard statement(s)

May be corrosive to metals. (H290)
Causes severe skin burns and eye damage. (H314)
May cause respiratory irritation. (H335)

Precautionary statement(s)

General

Not applicable.

Prevention

Do not breathe vapour/mist/spray. (P260)
Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. (P303+P361+P353)
IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Immediately call a POISON CENTER/doctor. (P310)

Storage

Not applicable.

Disposal

Not applicable.

Hazardous substances

Does not contain any substances required to report

Additional labelling

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Hydrogen chloride	CAS No.: 7647-01-0 EC No.: 231-595-7 REACH: 01-2119484862-27-0000 Index No.: 017-002-01-X	25 - 36 %	Met. Corr. 1, H290 (SCL: C ≥ 0.1%) Skin Corr. 1A, H314 (SCL: C ≥ 25%) Skin Corr. 1B, H314 (SCL: 10% ≤ C < 25%) Eye Dam. 1, H318 (SCL: C ≥ 1%) STOT SE 3, H335 (SCL: C ≥ 10 %)	[1]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Emergency telephone: see section 1.4.

Inhalation

Fresh air, calm and warmth. Contact a doctor if irritation persists. If breathing stops, give artificial respiration. If breathing is difficult, oxygen may be necessary. Contact a doctor immediately!

Skin contact

Remove contaminated clothing. Wash skin immediately with soap and water. Continue rinsing for at least 15 minutes. Burns should be treated by a physician.

Eye contact

Rinse immediately with large amounts of water (temperature 20-30°C) for at least 30 minutes. Remove contact lenses, if present, and open the eye wide. Transport to a doctor. Continue rinsing during transport.

Ingestion

Rinse mouth thoroughly with water. Drink plenty of water. Do not induce vomiting. Consult a doctor if all discomfort persists.

Burns

Not applicable.

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

The chemical is corrosive to the eyes and can cause permanent damage. Symptoms such as severe burning, watery eyes, redness and blurred vision may occur. In severe cases, there is a risk of visual impairment/blindness.
The chemical is corrosive to skin and mucous membranes. Forms blisters and can cause ulceration.
Corrosive if swallowed. Causes burning pain in the mouth, throat and esophagus. Risk of serious permanent damage. Risk of perforation of the esophagus. Hospital treatment required.
Mist or vapor will cause irritation of the upper respiratory tract, coughing and choking sensations. Concentrations of 50-100 ppm are barely tolerated for up to 1 hour. Higher concentrations may cause corrosion of the respiratory tract. Pulmonary edema.

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Fire in the surroundings should be extinguished with a suitable extinguishing agent.
Unsuitable extinguishing media: No information available.

5.2. Special hazards arising from the substance or mixture

The chemical is not classified as flammable.
Hazardous combustion products may include, but are not limited to: Hydrogen chloride (HCl).
Chlorine. Hydrogen.

5.3. Advice for firefighters

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face mask.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Be careful! The product is corrosive.
Ensure adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Wear specified protective equipment, see section 8.

6.2. Environmental precautions

Prevent discharge into sewers, waterways or soil.

6.3. Methods and material for containment and cleaning up

Small amounts should be dissolved/diluted with water and flushed down the drain.
Large spills: Neutralize spilled material with crushed limestone, sodium carbonate (soda) or lime.
Absorb in vermiculite, dry sand or earth and place in containers. Collect in suitable containers and dispose of as hazardous waste according to section 13. Containers and collected spillage should be carefully labeled with contents and hazard symbol/hazard pictogram.

6.4. Reference to other sections

See also sections 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Be careful! The product is corrosive.
Ensure adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Wear specified protective equipment, see section 8.
Never pour water directly into the product, this can cause a violent reaction/boiling. When diluting, always pour the product carefully into water.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Store in a container with a resistant inner liner.

Recommended storage material

Suitable material for containers: Plastic. Rubber.
Unsuitable material for containers: Metal.

Storage conditions

Protect from sunlight.

Incompatible materials

Strong bases
Oxidizing agents
Metalls
Sodium hypochlorite vinyl acetate monomer (VAM)
Food and animal feed

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrogen chloride
Long term exposure limit (8 hours) (mg/m^3): 7
Long term exposure limit (8 hours) (ppm): 5
Annotations:
E = The EU has set an indicative limit value and/or remark for the substance.
T = Ceiling value is a momentary value that specifies the maximum concentration of a chemical in the breathing zone, that must not be exceeded.

Reference: FOR-2011-12-06-1358 Forskrift om tiltaks- og grenseverdier. Sist endret gjennom FOR-2025-12-18-2660.

DNEL

Hydrogen chloride

Duration:	Route of exposure:	DNEL:
Long term – Local effects - Workers	Inhalation	8 mg/m³
Short term – Local effects - Workers	Inhalation	15 mg/m³

PNEC

Hydrogen chloride

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		36 µg/L
Intermittent release		45 µg/L
Marine water		36 µg/L
Sewage treatment plant		36 µg/L

8.2. Exposure controls

Ensure adequate ventilation. Personal protective equipment should be CE marked and should be selected in cooperation with the supplier of such equipment. The recommended protective equipment and the standards specified are indicative. Standards should be of the latest version. Risk assessment of the relevant workplace/operation (actual risk) may require other protective measures. The suitability and durability of the protective equipment will depend on the area of application.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

Follow the link to the relevant exposure scenario in section 16 and ensure that the operational conditions and risk management measures are complied with.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.
Ensure that eyewash stations and safety showers are located within easy reach.
Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
In case of insufficient ventilation or if there is a risk of inhalation of vapours, suitable respiratory protection with combination filter	E/P2		NS-EN 143 (Åndedrettsvern - Partikkelfiltre - Krav, prøving, merking).

Type	Class	Colour	Standards
(type E/P2) must be used.			

Skin protection

Recommended	Type/Category	Standards
Wear appropriate protective clothing to protect against skin contact.		-
Emergency shower should be available at the workplace.		-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0,35	> 480	EN374-2, EN16523-1, EN388	
Polychloroprene	0,5	> 480	EN374-2, EN16523-1, EN388	
Butyl	0,5	> 480	EN374-2, EN16523-1, EN388	
Polyvinylklorid	0,5	> 480	EN374-2, EN16523-1, EN388	
Fluorocarbon rubber	0,4	> 480	EN374-2	
Replace gloves at any sign of wear. Protective gloves must always be worn on clean, dry hands.	-	-		

Eye protection

Type	Standards	
Safety glasses with side shields.	EN ISO 16321-1	
An eyewash station should be available at the workplace. Either a fixed eyewash station connected to drinking water (tempered water preferred) or a portable disposable unit (eyewash bottle).	-	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Liquid

Colour
Yellowish

Odour / Odour threshold
Sharp/pungent (Odour treshold: 1 - 5 ppm)

pH
-

pH in solution
1,0 - 1,1 (30 - 36%)

Density (g/cm^3)
1,14 - 1,18 (15 °C)
Test method: 28-36% HCl in solution

Kinematic viscosity
1,72 mm^2/s

Dynamic viscosity
1,70 - 1,99 mPa.s

Particle characteristics
Not applicable - product is a liquid

Phase changes

Melting point/Freezing point (°C)
-63 - -27
Test method: 28-36% HCl in solution

Softening point/range (°C)
Does not apply to liquids.

Boiling point (°C)
97,7 - 56,1
Test method: 28-36% HCl in solution

Vapour pressure
11 - 115 mmHg (20 °C)
Test method: 28-36% HCl in solution

Relative vapour density
1,03

Decomposition temperature (°C)
No data available

Data on fire and explosion hazards

Flash point (°C)
No data available

Flammability (°C)
No data available

Auto-ignition temperature (°C)
No data available

Lower and upper explosion limit (% v/v)
No data available

Solubility

Solubility in water
Completely soluble

n-octanol/water coefficient (LogKow)
No data available.

Solubility in fat (g/L)

No data available.

9.2. Other information

Other physical and chemical parameters

No data available.

Oxidizing properties

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Strong mineral acid. May be corrosive to metals.

10.2. Chemical stability

Stable when stored and handled properly.

10.3. Possibility of hazardous reactions

In contact with metals, hydrogen gas may be formed. Develops heat in contact with water. In contact with oxidizing agents, chlorine may be released.

10.4. Conditions to avoid

Contact with metals produces hydrogen gas which can form an explosive mixture with air.
Avoid direct sunlight.

10.5. Incompatible materials

Strong acids
Oxidizing agents
Metalls
Sodium hypochlorite vinyl acetate monomer (VAM)

10.6. Hazardous decomposition products

None under normal conditions. See also section 5.2.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

The chemical is corrosive to the eyes and can cause permanent damage. Symptoms such as severe burning, watery eyes, redness and blurred vision may occur. In severe cases, there is a risk of visual impairment/blindness.
The chemical is corrosive to skin and mucous membranes. Forms blisters and can cause ulceration.
Corrosive if swallowed. Causes burning pain in the mouth, throat and esophagus. Risk of serious permanent damage. Risk of perforation of the esophagus. Hospital treatment required.
Mist or vapor will cause irritation of the upper respiratory tract, coughing and choking sensations. Concentrations of 50-100 ppm are barely tolerated for up to 1 hour. Higher concentrations may cause corrosion of the respiratory tract. Pulmonary edema.

11.2. Information on other hazards

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

Hydrogen chloride has been classified by IARC as a group 3 carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

The chemical is not classified as environmentally harmful.

12.2. Persistence and degradability

Methods for determining biodegradability are not relevant for inorganic substances.

12.3. Bioaccumulative potential

Product/substance	Hydrochloric acid 25-36%
LogKow:	- 2,65
Conclusion:	No potential for bioaccumulation

12.4. Mobility in soil

The product is soluble in water.
Expected to be mobile in soil.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

Prevent discharge into sewers, waterways or soil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Delivered as hazardous waste to an approved treatment or collector. The hazardous waste code (EAL code) is a guideline. The user must specify the correct EAL code if the area of use deviates. The product must not be poured down the drain.

EWC code

06 01 02*	Hydrochloric acid

National waste number and description

7131	Inorganic peroxides

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR/ADN/RID	UN1789	HYDROCHLORIC ACID	Transport hazard class: 8 Label: 8 Classification code: C1 	II	No	Limited quantities: 1 L Tunnel restriction code: (E) See below for additional information.
IMDG	UN1789	HYDROCHLORIC ACID	Transport hazard class: 8 Label: 8 Classification code: C1 	II	No	Limited quantities: 1 L EmS: F-A S-B See below for additional information.
IATA	UN1789	HYDROCHLORIC ACID	Transport hazard class: 8 Label: 8 Classification code: C1 	II	No	See below for additional information.

Additional information

This product is within scope of the regulations of transport of dangerous goods.
ADR/ADN/RID / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.
IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.
IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

Industrial use only.
People under the age of 18 shall not be exposed to this product.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Hydrogen chloride

Regulation on drug precursors
Hydrogen chloride is included (Category 3)

Product registration number
302131

Declaration of chemicals
If the product is imported or produced in more than 100 kg/year it is subject to registration in the Product Register because it is classified as hazardous.

Additional information
Not applicable.

Sources
Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH Regulation) of 30 May 2008 with subsequent amendments.
Regulations on classification, labelling and packaging of substances and mixtures (CLP) of 16.06.2012 with subsequent amendments.
FOR-2004-06-01-930: Regulations on the recycling and treatment of waste (the Waste Regulations), with subsequent amendments.
FOR 2009-04-01 no. 384: Regulations on the land transport of dangerous goods with subsequent amendments, Directorate for Civil Protection and Emergency Preparedness.
FOR-2015-05-19-541: Regulations on the declaration of chemicals to the product register (declaration regulations) of 01.06.2015 with subsequent amendments.
FOR 2004-06-01 no. 922: Regulations on restrictions on the use of chemicals and other products hazardous to health and the environment (the product regulations), with subsequent amendments; §§2-12, 2-14, Detergents.

15.2. Chemical safety assessment
Yes

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3
H290, May be corrosive to metals.
H314, Causes severe skin burns and eye damage.
H318, Causes serious eye damage.
H335, May cause respiratory irritation.

Abbreviations and acronyms
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

Kiwa Kompetanse AS / NOB

Other

Dette sikkerhetsdatablad er kvalitetskontrollert av Kiwa Kompetanse AS, som er sertifisert iht. ISO 9001:2015.
Country-language: NO-en

Exposure scenario

Saltsyre.pdf (https://almego.ecoonline.net/file/KHUBDD)