



## SAFETY DATA SHEET

### Hydrochloric Acid 32 - 36%

#### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<b>Product name</b>	Hydrochloric Acid 32 - 36%
<b>Synonyms, trade names</b>	Saltsyre 32 - 36%
<b>Supplier</b>	Acinor AS Titangt. 13 1630 Gamle Fredrikstad Norway Tel: +47 69 38 40 82 Fax: +47 69 38 40 84 E-mail: rolf.egil@acinor.no www.acinor.no
<b>Contact person</b>	Rolf Egil de Flon (E-mail: rolf.egil@acinor.no)
<b>Emergency telephone number</b>	National Poisons Information Service (NPIS), phone 0844 892 0111. WEB: <a href="http://www.toxbase.org">http://www.toxbase.org</a>
<b>EC No.</b>	231-595-7
<b>Reg.No. REACH</b>	01-2119484862-27

#### 2. HAZARDS IDENTIFICATION

Symbol(s)



Contains

hydrochloric acid ... %

Risk phrases

R-34 Causes burns.  
R-37 Irritating to respiratory system.

Safety phrases

S-1/2 Keep locked up and out of reach of children.  
S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S-36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

CLP

Hazard pictograms



<b>Signal word</b>	Danger
<b>Hazard statements</b>	Skin Corr. 1B: H314 Causes severe skin burns and eye damage. STOT SE 3: H335 May cause respiratory irritation.
<b>Precautionary statements</b>	P102 Keep out of reach of children. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. 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 doctor/physician. P405 Store locked up.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Name	EC No.	CAS No.	Content	Symbol	Classification
Water	231-791-2	7732-18-5	65 %	-	
hydrochloric acid ... %	231-595-7		35 %	Xi ,C	R-34, R-37

#### CLP

Name	CAS No.	REACH No.	Content	Symbol	Classification
Water	7732-18-5		65 %		
hydrochloric acid ... %			35 %	GHS07, GHS05, , Danger	Skin Corr. 1B: H314, STOT SE 3: H335

Section 16 contains detailed classification phrases.

### 4. FIRST AID MEASURES

<b>General</b>	Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. When unconscious, loosen tight clothing and position in secured recovery position. Secure open airways by bending head backwards, cleaning the mouth and removing false teeth. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen. If breathing stops, provide artificial respiration.
<b>Inhalation</b>	Move the exposed person to fresh air at once. To hospital or physician.
<b>Ingestion</b>	DO NOT INDUCE VOMITING! Get medical attention immediately! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!
<b>Skin</b>	Promptly flush contaminated skin with water. Promptly remove clothing if soaked through and flush the skin with water. Important to remove the substance from the skin immediately. Get medical attention immediately. Chemical burns must be treated by a physician.
<b>Eyes</b>	Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Get medical attention immediately. Continue to rinse.

### 5. FIRE-FIGHTING MEASURES

<b>Extinguishing media</b>	Use extinguishing media appropriate for surrounding fire.
<b>Special fire fighting procedures</b>	Move container from fire area if it can be done without risk. If possible, fight fire from protected position. Use pressurised air mask if substance is involved in a fire. Use special protective clothing. Regular protection may not be safe.
<b>Hazardous combustion products</b>	Hydrogen chloride (HCl). Corrosive gases/vapours/fumes.

**Protective measures in fire** Wear self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal protection** Avoid inhalation of vapours and spray mist and contact with skin and eyes. Wear appropriate personal protective equipment - see Section 8.

**Environmental protection** Avoid discharge into drains, water courses or onto the ground. Prevent spillage entering a watercourse or sewer, contaminating soil or vegetation. If this is not possible notify police and appropriate authorities immediately.

**Spill cleanup methods** Limit spread of spilled material. Runoff or release to sewer, waterway or ground is forbidden. Absorb with sand, earth or an inert material. Collect and reclaim or dispose in sealed containers in licensed waste. See section 13.

## 7. HANDLING AND STORAGE

**Usage precautions** Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. At dilution, always pour water into acid - never the opposite. Be aware of the risk of exothermic reactions.

**Storage precautions** Keep in cool, dry, ventilated storage and closed containers. Protect from light, including direct sunrays.

**Storage criteria** Corrosive storage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient name	CAS no.	Reference	LT Exp 8 Hrs	ST Exp 15 Min	Date
hydrochloric acid ... %		AN.	5/7 ppm/mg/m <sup>3</sup>		

**Ingredient comments** WEL = Workplace exposure limits. SK= Skin absorbance, Rep= Reproduction, Carc= Carcinogenic Senz= Sensitisers, Mut= Carcinogenic

**Protective equipment**



**Process conditions** Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash, quick drench.

**Ventilation** Provide adequate general and local exhaust ventilation. Provide corrosion-resistant local exhaust ventilation.

**Respirators** Special cartridge for inorganic gases and vapours (E.g. Cl<sub>2</sub>, H<sub>2</sub>S, HCN). Self-contained breathing apparatus.

**Protective gloves** For exposure of 4 to 8 hours use gloves made of: Neoprene. Butyl rubber. Nitrile. Polyvinyl chloride (PVC).

**Eye protection** Use approved safety goggles or face shield.

**Other Protection** Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

**Hygienic work practices** Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes wet or contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** Fluid. Mobile.

<b>Colour</b>	Colourless. Light yellow.		
<b>Odour</b>	Stinging.		
<b>Solubility description</b>	Soluble in water. Soluble in: Alcohol.		
<b>Boiling point (°C, interval)</b>	110	<b>Pressure</b>	
<b>Melting/freezing point (°C, interval)</b>	-70		
<b>Density (g/cm<sup>3</sup>)</b>	1,1-1,2	<b>Temperature (°C)</b>	20
<b>Vapour density (air=1)</b>	1,26		
<b>Vapour pressure</b>	215 mmHg	<b>Temperature (°C)</b>	
<b>pH-value, conc. solution</b>	<2		

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal temperature conditions and recommended use.
<b>Materials to avoid</b>	Bases, alkalies (organic). Bases,alkalies (inorganic).
<b>Hazardous decomp. products</b>	Hydrogen chloride (HCl).

## 11. TOXICOLOGICAL INFORMATION

<b>Toxic dose - LD 50:</b>	900 mg/kg (oral rat) (25% løsnng)
<b>Sensitization</b>	No allergic reaction is known.
<b>Genotoxicity</b>	No known heritable or mutagenic effects.
<b>Carcinogenicity</b>	No cancer hazard.
<b>Reproduction toxicity</b>	No known reproductive effects.
<b>Inhalation</b>	Irritating to respiratory system. Will cause burning in mouth and respiratory system.
<b>Ingestion</b>	Causes burns. May cause burns in mucous membranes, throat, oesophagus and stomach.
<b>Skin</b>	Causes burns. May cause serious chemical burns of the skin.
<b>Eyes</b>	Causes burns. Risk of permanent corneal damage, loss of sight and blindness.
<b>Health warnings</b>	The product causes severe burns. Prolonged or repeated exposure could result in permanent injury.
<b>Route of entry</b>	Inhalation. Ingestion. Skin and/or eye contact.
<b>Medical considerations</b>	In case of eyedamage, continue to flush with water all the way to the doctor. Chemical burns to skin may be treated as fire caused wounds. Splash in eye requires examination by eye specialist.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Release of concentrated product into sewage will reduce the pH in the water, and the necessity of neutralization has to be evaluated.
<b>Mobility</b>	The product is soluble in water.
<b>Bioaccumulative potential</b>	No bioaccumulation expected.
<b>Persistence and degradability</b>	The product contains essential inorganic compounds and the biodegradability is therefore not relevant.
<b>Other adverse effects</b>	Results of PBT and vPvB assessment: No data available.

## 13. DISPOSAL CONSIDERATIONS

<b>General/cleaning</b>	Hazardous waste.
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<b>Disposal methods</b>	Confirm disposal procedures with environmental engineer and local regulations.
<b>Waste class</b>	06 01 02* hydrochloric acid
<b>Contaminated packaging</b>	The product packaging must be disposed of in compliance with the country specific regulations.

## 14. TRANSPORT INFORMATION

Label for conveyance



<b>Proper shipping name (national)</b>	SALTSYRE
<b>Proper shipping name (international)</b>	Hydrochloric acid
<b>ROAD TRANSPORT (ADR):</b>	
UN no. road	1789
ADR class	Class 8: Corrosive substances.
ADR Hazard labels	8
Classification code	C1
ADR packing group	III
Hazard no. (ADR)	80 Corrosive or slightly corrosive substance.
Hazard no. (ADR)	80
<b>RAIL TRANSPORT (RID):</b>	
RID class no.	8
RID Hazard labels	8
RID packing group	III
<b>SEA TRANSPORT (IMDG):</b>	
UN no. sea	1789
IMDG class	8
IMDG packing group	III
EmS no.	F-A, S-B
Marine pollutant	No.
<b>AIR TRANSPORT (IATA-DGR / ICAO-TI):</b>	
UN no., air	1789
IATA/ICAO class	8
IATA/ICAO packing group	III

## 15. REGULATORY INFORMATION

<b>Lists of references (Norway)</b>	National regulations for health, fire and environment labelling. Acts relating to Working Environment, Pollution Control, Prevention of Fire, Explosion and Accidents. Norwegian Component List, CLP00. Authorities: Norwegian Labour Inspection Authority, Directorate for Civil Protection and Emergency Planning, Norwegian Petroleum Directorate, Petroleum Safety Authority Norway. Transport legislation: ADR/RID, IMDG, IATA/ICAO. EU-regulation: 1272/2008/EC (CLP00), 453/2010/EC (CLP).
<b>Product declaration number (Norway)</b>	302131
<b>EC no.</b>	231-595-7

## 16. OTHER INFORMATION

<b>Explanations to R-phrases in section 3</b>	R-34 Causes burns. R-37 Irritating to respiratory system.
<b>Explanations to classification in section 3</b>	H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation.
<b>* Information revised since the previous version of the SDS</b>	
<b>Revision comments</b>	Revision 2010.09.22 no. 1: supersedes safety data sheet of 2009.11.16. Changed name from "Hydrochloric Acid 35%" to "Hydrochloric Acid 32 -36%". No change in composition or classification. Revision 2011.01.06 no. 2: supersedes safety data sheet of 2010.09.22. Prepared in CLP-format and in compliance with CLP00. No change in composition or classification.
<b>Issued by</b>	Essenticon AS, Leif Weldingsvei 14, N-3208 Sandefjord, Norway. Tel.: +47 33 42 34 50 - Fax: +47 33 42 34 59 www.essenticon.com
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