

SAFETY DATA SHEET

Hydrochloric Acid 32 - 36%

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

Date issued 19.11.2012

1.1. Product identifier

Product name Hydrochloric Acid 32 - 36%
 Synonyms Saltsyre 32 - 36%
 REACH Reg No 01-2119484862-27
 EC no. 231-595-7

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

Use of the substance/preparation pH regulation. Production of PVC. Acidity substance in food.

1.3. Details of the supplier of the safety data sheet

Distributor

Company name Acinor AS
 Office address Titangt. 13, NO-1630 Gamle Fredrikstad
 Postal address Titangaten 13
 Postcode 1630
 City Gamle Fredrikstad
 Country Norway
 Tel 69384082
 Fax 69384084
 E-mail post@acinor.no
 Website http://www.acinor.no
 Enterprise no. NO 984 648 324 MVA
 Contact person Rolf Egil de Flon

1.4. Emergency telephone number

Emergency telephone Toxic Information:22 59 13 00

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC Xi; R37
 C; R34
 Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] Skin Corr 1B; H314;
 STOT SE3; H335;
 Substance / mixture hazardous properties Causes severe skin burns and eye damage. Irritating to respiratory system.

2.2. Label elements

Hazard Pictograms (CLP)



Composition on the label Hydrochloric acid ...%: 35 %
 Signal word Danger

Hazard statements	H314 Causes Severe skin burns and eye damage. H335 May cause respiratory irritation.
Precautionary statements	P260 Do not breathe dust/fume/gas/mist/vapours/spray. 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.

2.3. Other hazards

PBT / vPvB	PBT/vPvB assessment has not been performed.
------------	---

SECTION 3: Composition/information on ingredients

3.1. Substances

Component name	Identification	Classification	Contents
Water	CAS no.: 7732-18-5 EC no.: 231-791-2		65 %
Hydrochloric acid ...%	EC no.: 231-595-7 Index no.: 017-002-01-X Synonyms: Hydrogen chloride, gas and aerosol mists	C; R34 Xi; R37 Skin Corr. 1B; H314 STOT SE 3; H335	35 %
Component comments	See section 16 for explanation of H- and R-phrases listed above.		

SECTION 4: First aid measures

4.1. Description of first aid measures

General	If in doubt, seek medical advice.
Inhalation	Remove victim immediately from source of exposure. Fresh air and rest. Rinse nose and mouth with water. Contact physician if irritation continues. For breathing difficulties oxygen may be necessary.
Skin contact	Remove contaminated clothing. Flush skin thoroughly with water. Important to remove the substance from the skin immediately. Get medical attention. Chemical burns must be treated by a physician. Wash contaminated clothes before reuse.
Eye contact	Promptly rinse eyes with plenty of water (tempered at 20-30°C) for at least 15 minutes. Remove contact lenses and open eyes wide apart. Immediately consult a doctor. Transport to physician. Keep on flushing during transport.
Ingestion	DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Drink a few glasses of water or milk. Do not give victim anything to drink if he is unconscious. Immediately consult a doctor. Transport to hospital. Bring the safety data sheet.

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

Information for health personnel	Treat Symptomatically.
Acute symptoms and effects	Corrosive. Forms blisters and can cause ulceration. Corrosive to the eyes, danger of vision impairment / blindness, burning nose, chemical burns to the skin. Causes burns if swallowed. Causes burning sensation in the mouth, throat and esophagus. May cause serious permanent damage. Inhalation: The product irritates the airways and can cause itching, burning and cough. May cause chemical burns to the respiratory tract.
Delayed symptoms and effects	Prolonged or repeated exposure can cause permanent damage.

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

Other Information	Splashes in the eyes and ingestion of more than an insignificant amount requires immediate medical attention. Corrosive burns on the skin must be treated as thermal burns.
-------------------	---

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Improper extinguishing media	Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The product is not classified as flammable.
Hazardous combustion products	Hydrogen chloride (HCl). Corrosive gases/vapours/fumes.

5.3. Advice for firefighters

Personal protective equipment	Use compressed air equipment when the product is involved in fire. In case of evacuation, an approved protection mask should be used. See also section 8.
Other Information	Containers close to fire should be removed immediately or cooled with water. Spill water from fire fighting may be strongly caustic.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Use protective equipment as referred to in section 8. Provide adequate ventilation. Avoid inhalation of spray mist and contact with skin and eyes.
----------------------	--

6.2. Environmental precautions

Environmental precautions	Do not allow to enter into sewer, water system or soil.
---------------------------	---

6.3. Methods and material for containment and cleaning up

Methods for cleaning	Absorb in vermiculite, dry sand or earth and place into containers. Collect in a suitable container and dispose as hazardous waste according to section 13.
Cleaning up	Limit spread of spilled material.

6.4. Reference to other sections

Other instructions	See also sections 8 and 13.
--------------------	-----------------------------

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Use protective equipment as referred to in section 8. Provide adequate ventilation. Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid direct contact. Never pour water into acid/base. Dilute by slowly pouring the product into water while stirring. Be aware of the risk of exothermic reactions. Immediately change contaminated clothes.
----------	---

Protective Measures

Advice on general occupational hygiene	Wash hands at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke during work.
--	---

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in a tightly closed container in a cool, well-ventilated room, protected from direct sunlight. Store in a dry place. Corrosive storage.
Hints on storage assembly	Keep away from: Bases/alkalies (organic). Bases/alkalies (inorganic).

7.3. Specific end use(s)

Specific use(s)	See section 1.2.
-----------------	------------------

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Information about threshold limit values

CAS-nr.:7647-01-0 has got note T.
T = ceiling value

Exposure limit values

Component name	Identification	Value	Year
Hydrogen chloride (gas and aerosol mists)	CAS no.: 7647-01-0 EC no.: 231-595-7	8 h.: 5 ppm 8 h.: 7 mg/m ³	2011

8.2. Exposure controls

Occupational exposure controls

Provide adequate ventilation. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory protection

Respiratory protection

In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type B2/P2). Self-contained breathing apparatus.

Hand protection

Hand protection

Use chemical resistant gloves.

Suitable gloves type

Polyvinyl chloride (PVC). Neoprene. Nitrile. Butyl rubber.

Breakthrough time

Penetration time is not known. The recommended material of gloves is recommended after a study of the single components in the product.

Eye / face protection

Eye protection

Use approved safety goggles or face shield.

Skin protection

Skin protection (other than of the hands)

Wear appropriate clothing to prevent any possibility of skin contact.

Additional skin protection measures

Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes wet or contaminated.

Other Information

Other Information

Eye wash facilities and emergency shower should be available when handling this product. The listed protective equipment is a recommendation. A risk assessment of the actual risk may lead to other requirements.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Fluid.
Colour	Colourless. Light yellow.
Odour	Pungent odour.
Comments, Odour limit	Not known.
pH (as supplied)	Value: < 2
Melting point/melting range	Value: -70 °C
Comments, Melting point / melting range	Freezing point.
Boiling point / boiling range	Value: 110 °C
Comments, Flash point	Not known.
Comments, Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Comments, Explosion limit	Not known.
Vapour pressure	Value: 215 mmHg
Comments, Vapour density	Not known.
Specific gravity	Value: 1,1-1,2 g/cm ³ Test temperature: 20 °C
Comments, Specific gravity	Valid for density.
Solubility in water	Soluble.

Comment, Solubility	Soluble in: Alcohol.
Comments, Partition coefficient: n-octanol / water	Not known.
Comments, Spontaneous combustability	Not known.
Comments, Decomposition temperature	Not known.
Comments, Viscosity	Not known.

Physical hazards

Explosive properties	Not known.
Oxidising properties	Not known.

9.2. Other information

Other physical and chemical properties

Physical and chemical properties	Not known.
----------------------------------	------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Reactive with the materials listed in Section 10.5.
------------	---

10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
-----------	---

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Arise in contact with incompatible materials (section 10.5) and inappropriate conditions (section 10.4).
------------------------------------	--

10.4. Conditions to avoid

Conditions to avoid	Do not add water directly to the product. It may cause a violent reaction. Generates heat upon contact with water.
---------------------	---

10.5. Incompatible materials

Materials to avoid	Bases, alkalis (organic). Bases, alkalis (inorganic).
--------------------	---

10.6. Hazardous decomposition products

Hazardous decomposition products	None under normal conditions. See also section 5.2.
----------------------------------	---

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological Information:

LD50 oral	Value: 900 mg/kg Test animal species: Rat Comments: (25% solution).
-----------	---

Other information regarding health hazards

General	This substance is corrosive.
---------	------------------------------

Potential acute effects

Inhalation	Irritating to respiratory system. Vapours are corrosive. After 24-36 hours, injured persons may develop serious shortness of breath and lung oedema.
Skin contact	Corrosive. Prolonged contact causes serious tissue damage. Cause blisters and burns.
Eye contact	Corrosive. Immediate first aid is necessary. Risk of serious damage to eyes. Risk of permanent corneal damage, loss of sight and blindness.
Ingestion	Causes burns if swallowed. Causes burning sensation in the mouth, throat and esophagus. May cause serious permanent damage. May cause burns in mucous membranes, throat, oesophagus and stomach.
Aspiration hazard	Not classified with respect to aspiration toxicity. The classification criteria are not met.

Delayed effects / repeated exposure

Sensitisation	None of the substances mentioned in section 3 is considered to have sensitizing effects according to current labelling rules.
---------------	---

Carcinogenic, Mutagenic or Reprotoxic

Carcinogenicity	None of the substances mentioned in section 3 is considered as carcinogenic according to current labelling rules.
Mutagenicity	None of the substances mentioned in section 3 are considered to have mutagenic or pro-mutagenic effects.
Teratogenic properties	None of the substances mentioned in section 3 are considered to cause harm to the unborn child.
Reproductive toxicity	None of the substances mentioned in section 3 are considered to have genotoxic effects.

SECTION 12: Ecological information**12.1. Toxicity**

Ecotoxicity	The product is not classified as dangerous for the environment. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms. Evaluate the necessity of neutralization.
-------------	--

12.2. Persistence and degradability

Persistence and degradability	The product contains inorganic compounds that are not biodegradable.
-------------------------------	--

12.3. Bioaccumulative potential

Bioaccumulative potential	Product is not expected to be bioaccumulative.
---------------------------	--

12.4. Mobility in soil

Mobility	The product is soluble in water.
----------	----------------------------------

12.5. Results of PBT and vPvB assessment

PBT assessment results	PBT assessment has not been performed.
vPvB evaluation results	vPvB assessment has not been performed.

12.6. Other adverse effects

Other adverse effects / Remarks	Acids cause decreased pH values in the water. A low pH value harms aquatic organisms. Do not allow to enter into sewer, water system or soil.
---------------------------------	---

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Specify the appropriate methods of disposal	Disposed of as hazardous waste by approved contractor. The waste code (EWC-Code) is intended as a guide. The code must be chosen by the user, if the use differs from the one mentioned above.
Product classified as hazardous waste	Yes
EWC waste code	EWC: 06 01 02 hydrochloric acid
NORSAS	7131 Acids, inorganic.

SECTION 14: Transport information**14.1. UN number**

ADR	1789
RID	1789
IMDG	1789
ICAO/IATA	1789

14.2. UN proper shipping name

ADR	HYDROCHLORIC ACID
RID	HYDROCHLORIC ACID
IMDG	HYDROCHLORIC ACID

ICAO/IATA	HYDROCHLORIC ACID
-----------	-------------------

14.3. Transport hazard class(es)

ADR	8
Hazard no.	80
RID	8
IMDG	8
ICAO/IATA	8

14.4. Packing group

ADR	III
RID	III
IMDG	III
ICAO/IATA	III

14.5. Environmental hazards

IMDG Marine pollutant	No
-----------------------	----

14.6. Special precautions for user

ADR Other applicable information	Classification code: C1
EmS	F-A, S-B

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**Other applicable information.**

Other applicable information.	Not relevant.
-------------------------------	---------------

SECTION 15: Regulatory information

EC no.	231-595-7
--------	-----------

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

References (laws/regulations)	Norwegian regulation on classification and labeling of dangerous chemicals. Valid from June 21, 2010. Regulation on classification, labeling and packaging of substances and mixtures (CLP) dated 16.06.2012. Commission Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II Safety Data Sheets. Administrative norms for pollution of the atmosphere, the latest edition, from Norwegian labour inspection authority Norwegian regulations on waste, no. 930/2004, from Ministry of the Environment. Dangerous Goods regulations The Safety Data Sheet is based on information provided by the producer.
-------------------------------	--

Declaration no.	302131
-----------------	--------

15.2. Chemical safety assessment

Chemical safety assessment has been carried out	No
---	----

SECTION 16: Other information

Supplier's notes	The information contained in this SDS must be made available to all those who handle the product.
Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]	Skin Corr 1B; H314; STOT SE3; H335;
List of relevant R phrases (under	R34 Causes burns.

headings 2 and 3).	R37 Irritating to respiratory system.
List of relevant H-phrases (Section 2 and 3).	H314 Causes Severe skin burns and eye damage. H335 May cause respiratory irritation.
Abbreviations and acronyms used	PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative LD50: Lethal dose, is the amount of a substance given to a group of test animals, which causes the death of 50%.
Sources of key data used to compile the safety data sheet	Suppliers Safety data sheet dated: 06.01.2011
Information which has been added, deleted or revised	New Safety Data Sheet.
Checking quality of information	This SDS is quality controlled by National Institute of Technology in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2008.
Responsible for safety data sheet	Acinor AS
Prepared by	National Institute of Technology as, Norway v/ Camilla M. Ormset