

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issuing Date 27-Nov-2019

Revision Date 4-Jan-2023

Revision Number 3

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

1.1. Product identifier

Product Code(s) PN000790; PN002244

Product Name Hydrochloric Acid

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

Recommended use Laboratory reagent
For professional use only

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Importer

Associates of Cape Cod International
Deacon Park, Moorgate Road
Knowsley, Liverpool, UK, L33 7RX
TEL: (+44) 151 547 7444

Supplier

Associates of Cape Cod, Inc.
124 Bernard E. Saint Jean Drive
East Falmouth, MA 02536-4445
508 540 3444

For further information, please contact

E-mail address mbedford@acciusa.com

1.4. Emergency telephone number

Emergency Telephone CHEMTEL: +1-360-256-7365 (INTERNATIONAL)
+1-800-704-9215 (NORTH AMERICA)

Emergency Telephone - §45 - (EC)1272/2008

Europe 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

| | |
|-----------------------------------|---------------------|
| Skin corrosion/irritation | Category 1 - (H314) |
| Serious eye damage/eye irritation | Category 1 - (H318) |

2.2. Label elements



Signal word
Danger

Hazard statements

H314 - Causes severe skin burns and eye damage

Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P280 - Wear protective gloves/protective clothing and eye/face protection

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]

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

P321 - Specific treatment (see supplemental first aid instructions on this label)

Additional information

This product requires tactile warnings if supplied to the general public This product requires child resistant fastenings if supplied to the general public

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

| Chemical name | EC No | CAS No | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH registration number |
|-------------------|-----------|-----------|----------|---|---------------------------|
| Hydrochloric acid | 231-595-7 | 7647-01-0 | 1-1.5 | Acute Tox. 3 (H331) Skin Corr. 1A (H314) Press. Gas | No data available |

Full text of H- and EUH-phrases: see section 16

SECTION 4: First aid measures**4.1. Description of first aid measures****General advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.

Ingestion

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Wear personal protective clothing (see section 8).

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

Symptoms Burning sensation.

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

Note to doctors Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media None known based on information supplied.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/Personal protection**8.1. Control parameters****Exposure Limits**

| Chemical name | European Union | United Kingdom | France | Spain | Germany |
|--------------------------------|--|--|--|--|--|
| Hydrochloric acid 7647-01-0 | TWA: 5 ppm TWA: 8 mg/m ³ STEL: 10 ppm STEL: 15 mg/m ³ | TWA: 1 ppm TWA: 2 mg/m ³ STEL: 5 ppm STEL: 8 mg/m ³ | STEL: 5 ppm STEL: 7.6 mg/m ³ | TWA: 5 ppm TWA: 7.6 mg/m ³ STEL: 10 ppm STEL: 15 mg/m ³ | TWA: 2 ppm TWA: 3 mg/m ³ |
| Chemical name | Italy | Portugal | Netherlands | Finland | Denmark |
| Hydrochloric acid 7647-01-0 | TWA: 5 ppm TWA: 8 mg/m ³ STEL: 10 ppm STEL: 15 mg/m ³ | TWA: 5 ppm TWA: 8 mg/m ³ STEL: 10 ppm STEL: 15 mg/m ³ Ceiling: 2 ppm | TWA: 8 mg/m ³ STEL: 15 mg/m ³ | STEL: 5 ppm STEL: 7.6 mg/m ³ | Ceiling: 5 ppm Ceiling: 8 mg/m ³ |
| Chemical name | Austria | Switzerland | Poland | Norway | Ireland |
| Hydrochloric acid 7647-01-0 | TWA: 5 ppm TWA: 8 mg/m ³ STEL 10 ppm STEL 15 mg/m ³ | TWA: 2 ppm TWA: 3 mg/m ³ STEL: 4 ppm STEL: 6 mg/m ³ | STEL: 10 mg/m ³ TWA: 5 mg/m ³ | Ceiling: 5 ppm Ceiling: 7 mg/m ³ | TWA: 8 mg/m ³ TWA: 5 ppm STEL: 10 ppm STEL: 15 mg/m ³ |

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls**Engineering controls**

Showers

| | |
|--|---|
| | Eyewash stations Ventilation systems. |
| Personal protective equipment | |
| Eye/face protection | Tight sealing safety goggles. Face protection shield. |
| Hand protection | Wear suitable gloves. Impervious gloves. |
| Skin and body protection | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. |
| Environmental exposure controls | No information available. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | | |
|--|---------------------------|--------------------------------|
| Appearance | | |
| Physical state | Liquid | |
| Colour | Colourless | |
| Odour | No information available | |
| Odour threshold | No information available | |
| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
| pH | 0.8 - 1.2 | |
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flash point | No data available | None known |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapour pressure | No data available | None known |
| Vapour density | No data available | None known |
| Relative density | No data available | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Explosive properties | No information available. | |
| Oxidising properties | No information available. | |

9.2. Other information

| | |
|------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |

Liquid Density No information available
Bulk density No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity None under normal use conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Incompatible materials Acids. Bases. Oxidising agent.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.

Ingestion Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the

mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing.

Numerical measures of toxicity

No information available.

Acute toxicity

Based on available data, the classification criteria are not met

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-------------------|-------------------------|-------------------------|-------------------------|
| Hydrochloric acid | 238 - 277 mg/kg (Rat) | > 5010 mg/kg (Rabbit) | = 1.68 mg/L (Rat) 1 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---|
| Skin corrosion/irritation | Classification based on data available for ingredients. Causes burns. |
| Serious eye damage/eye irritation | Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns. |
| Respiratory or skin sensitisation | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity The environmental impact of this product has not been fully investigated.

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment .

| Chemical name | PBT and vPvB assessment |
|-------------------|---|
| Hydrochloric acid | The substance is not PBT / vPvB PBT assessment does not apply |

12.6. Other adverse effects

Other adverse effects No information available.

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

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information**IMDG**

14.1 UN number UN1789
 14.2 UN proper shipping name HYDROCHLORIC ACID SOLUTION
 14.3 Transport hazard class(es) 8
 14.4 Packing group II
 Description UN1789, HYDROCHLORIC ACID SOLUTION, 8, II
 14.5 Marine pollutant Not applicable
 14.6 Special Precautions for Users
 Special Provisions None
 EmS-No F-A, S-B
 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code No information available

RID

14.1 UN number UN1789
 14.2 UN proper shipping name HYDROCHLORIC ACID SOLUTION
 14.3 Transport hazard class(es) 8
 14.4 Packing group II
 Description UN1789, HYDROCHLORIC ACID SOLUTION, 8, II
 14.5 Environmental hazards Not applicable
 14.6 Special Precautions for Users
 Special Provisions None
 Classification code C1

ADR

14.1 UN number UN1789
 14.2 UN proper shipping name HYDROCHLORIC ACID SOLUTION
 14.3 Transport hazard class(es) 8
 Labels 8
 14.4 Packing group II
 Description UN1789, HYDROCHLORIC ACID SOLUTION, 8, II
 14.5 Environmental hazards Not applicable
 14.6 Special Precautions for Users
 Special Provisions 520

Classification code C1
Tunnel restriction code (E)

IATA

14.1 UN number UN1789
14.2 UN proper shipping name Hydrochloric acid solution
14.3 Transport hazard class(es) 8
14.4 Packing group II
Description UN1789, Hydrochloric acid solution, 8, II
14.5 Environmental hazards Not applicable
14.6 Special Precautions for Users
Special Provisions A3, A803
ERG Code 8L **Note:** None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Germany**

Water hazard class (WGK) non-hazardous to water (nwg)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Named dangerous substances per Seveso Directive (2012/18/EU)

| Chemical name | Lower-tier requirements (tons) | Upper-tier requirements (tons) |
|-------------------------------|--------------------------------|--------------------------------|
| Hydrochloric acid - 7647-01-0 | 25 | 250 |

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

International Inventories

TSCA Contact supplier for inventory compliance status
DSL/NDSL Contact supplier for inventory compliance status
EINECS/ELINCS Contact supplier for inventory compliance status
ENCS Contact supplier for inventory compliance status
IECSC Contact supplier for inventory compliance status
KECL Contact supplier for inventory compliance status
PICCS Contact supplier for inventory compliance status
AICS Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H314 - Causes severe skin burns and eye damage

H331 - Toxic if inhaled

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value * Skin designation

| Classification procedure | |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - Vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitisation | Calculation method |
| Skin sensitisation | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |
| Health hazards not otherwise classified (HHNOC) | Calculation method |

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Issuing Date 27-Nov-2019

Revision Date 4-Jan-2023

Revision Note 3

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet