

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision date 21-Jun-2024 Revision Number 1

# 1. Identification

#### **Product identifier**

Product Name Hydrochloric Acid 10% FCC

Other means of identification

Product Code(s) 2768

UN number or ID number UN1789

Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended use Industrial use

Laboratory use

Industrial Manufacturing (all)

Restrictions on use No information available

# Details of the supplier of the safety data sheet

# **Supplier Address**

Columbus Chemical Industries, Inc. N4335 Temkin Rd. Columbus, WI 53925 USA Phone: (920) 623-2140

Fax: (920) 623-2577 www.columbuschemical.com

# Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 for US / 703-527-3887 outside US

Emergency Telephone 911

# 2. Hazard(s) identification

# Classification

| Skin corrosion/irritation                        | Category 1 Sub-category A |
|--|---------------------------|
| Serious eye damage/eye irritation                | Category 1                |
| Specific target organ toxicity (single exposure) | Category 3                |
| Corrosive to metals                              | Category 1                |

# Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements

#### **Danger**

#### Hazard statements

H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation

H290 - May be corrosive to metals.



#### **Precautionary Statements - Prevention**

P260 - Do not breathe dusts or mists

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

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

P234 - Keep only in original packaging

#### **Precautionary Statements - Response**

P310 - Immediately call a POISON CENTER or doctor/physician

P321 - Specific treatment (see First-Aid Measures on SDS)

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

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

P363 - Wash contaminated clothing before reuse

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P310 - Immediately call a POISON CENTER or doctor/physician

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P390 - Absorb spillage to prevent material damage

#### **Precautionary Statements - Storage**

P405 - Store locked up

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P406 - Store in corrosion resistant container with a resistant inner liner

#### **Precautionary Statements - Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

# Other information

No information available.

# 3. Composition/information on ingredients

#### Mixture

| Chemical name     | CAS No    | Weight-% | Formula | Molecular Weight |
|-------------------|-----------|----------|---------|------------------|
| Water             | 7732-18-5 | Balance  | H2O     | 18.00 g/mol      |
| Hydrochloric acid | 7647-01-0 | 9-11     | HCI     | 36.46 g/mol      |

# 4. First-aid measures

# **Description of first aid measures**

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

required.

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 indested 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

attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open

while rinsing. Do not rub affected area. Get immediate medical attention.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical attention.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce

vomiting. Get immediate medical attention.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

> Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin.

Use barrier to give mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

**Symptoms** Burning sensation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

> 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.

5. Fire-fighting measures

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

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

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 vapors.

Hazardous combustion products Hydrogen chloride.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge None

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

# 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Attention! Corrosive material. 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.

# Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and

waterways.

Methods for cleaning up Neutralize with soda ash (sodium carbonate) or lime over area of spill. Take up with sand or

other noncombustible absorbent material and place into containers for later disposal. Clean

contaminated surface thoroughly.

# 7. Handling and storage

# Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Do not breathe

dust/fume/gas/mist/vapors/spray. 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 before reuse.

# 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.

# 8. Exposure controls/personal protection

# Control parameters

# **Exposure Limits**

| Chemical name     | ACGIH TLV      | OSHA PEL   | NIOSH  |
|-------------------|----------------|--|--|
| Hydrochloric acid | Ceiling: 2 ppm | (vacated) Ceiling: 5 ppm<br>(vacated) Ceiling: 7 mg/m³<br>Ceiling: 5 ppm<br>Ceiling: 7 mg/m³ | IDLH: 50 ppm<br>Ceiling: 5 ppm<br>Ceiling: 7 mg/m <sup>3</sup> |

# **Appropriate engineering controls**

Engineering controls Showers

Eyewash stations Ventilation systems.

# Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles. Face protection shield.

Wear suitable gloves. Impervious gloves. Hand protection

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 Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.

# 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid **Appearance** Clear

Colorless to light yellow Color

Sharp Irritating Odor

**Odor threshold** No information available

Remarks • Method **Property** Values

Acidic None known pН pH (as aqueous solution) No data available None known Melting point / freezing point No data available None known No data available None known Initial boiling point and boiling

range

No data available Flash point None known **Evaporation rate** No data available None known No data available **Flammability** None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressure No data available None known Relative vapor density No data available None known Relative density 1.05 None known Water solubility Soluble in water None known Solubility(ies) Soluble in Methanol None known No data available **Partition coefficient** None known **Autoignition temperature** No data available None known **Decomposition temperature** None known

Kinematic viscosity No data available None known Dynamic viscosity No data available None known

Other information

**Explosive properties** No information available Oxidizing properties No information available No information available Softening point No information available Molecular weight No information available **VOC** content **Liquid Density** No information available **Bulk density** No information available

# 10. Stability and reactivity

No information available. Reactivity

**Chemical stability** Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

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

Incompatible materials Contact with metals may evolve flammable hydrogen gas. Alkali.

Hazardous decomposition products Hydrogen chloride gas.

# 11. Toxicological information

#### 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. May cause irritation of respiratory tract.

**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.

# **Acute toxicity**

# **Numerical measures of toxicity**

#### The following values are calculated based on chapter 3.1 of the GHS document

 ATEmix (oral)
 99,999.00
 mg/kg

 ATEmix (dermal)
 45,545.50
 mg/kg

 ATEmix (inhalation-gas)
 99,999.0000
 ppm

 ATEmix (inhalation-dust/mist)
 99,999.000
 mg/l

#### **Component Information**

| Chemical name     | Oral LD50             | Dermal LD50           | Inhalation LC50      |
|-------------------|-----------------------|-----------------------|----------------------|
| Water             | >90 mL/kg (Rat)       | -                     | -                    |
| 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 severe skin burns and eye

damage.

Classification based on data available for ingredients. Causes serious eye damage. Causes Serious eye damage/eye irritation

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

No information available. Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name     | ACGIH | IARC    | NTP | OSHA |
|-------------------|-------|---------|-----|------|
| Hydrochloric acid | -     | Group 3 | 1   | -    |

# Legend

# IARC (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity No information available.

STOT - single exposure May cause respiratory irritation.

STOT - repeated exposure No information available.

Target organ effects Respiratory system, Eyes, Skin.

**Aspiration hazard** No information available.

Other adverse effects No information available.

Interactive effects No information available.

# 12. Ecological information

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

| Species | Endpoint type | Effective dose | Exposure time |
|---------|---------------|----------------|---------------|
| Fish    | LC50          | 282 mg/L       | 96 hours      |

Persistence and degradability No information available.

**Bioaccumulation** There is no data for this product.

Other adverse effects No information available.

# 13. Disposal considerations

# **Disposal methods**

Waste from residues/unused

products

environmental legislation.

Contaminated packaging Do not reuse empty containers. Dispose of contents/containers in accordance with local

Dispose of in accordance with local regulations. Dispose of waste in accordance with

regulations.

# 14. Transport information

DOT Regulated
UN number or ID number UN1789

Proper shipping name Hydrochloric acid

Transport hazard class(es) 8
Packing group II
DOT Marine Pollutant No

TDG Regulated
UN number or ID number UN1789

UN proper shipping name Hydrochloric acid

Transport hazard class(es) 8
Packing group | |

ICAO (air) Regulated
UN number or ID number UN1789

UN proper shipping name Hydrochloric acid

Transport hazard class(es) 8
Packing group ||

IATA Regulated
UN number or ID number UN1789

UN proper shipping name Hydrochloric acid

Transport hazard class(es) 8
Packing group || |

IMDG Regulated
UN number or ID number UN1789

UN proper shipping name Hydrochloric acid

Transport hazard class(es) 8
Packing group | |

# 15. Regulatory information

# International Inventories

TSCA Complies. DSL/NDSL Complies.

EINECS/ELINCS
Contact supplier for inventory compliance status.

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

# **NZIoC** - New Zealand Inventory of Chemicals

# US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name                  | SARA 313 - Threshold Values % |
|--------------------------------|-------------------------------|
| Hydrochloric acid<br>7647-01-0 | 1.0                           |

#### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

# **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical name     | CWA - Reportable | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous |
|-------------------|------------------|------------------------|---------------------------|-----------------|
|                   | Quantities       |                        |                           | Substances      |
| Hydrochloric acid | 5000 lb          | -                      | -                         | X               |

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Chemical name     | Hazardous Substances RQs | Extremely Hazardous<br>Substances RQs | Reportable Quantity (RQ)                   |
|-------------------|--------------------------|---------------------------------------|--|
| Hydrochloric acid | 5000 lb                  | 5000 lb                               | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

# US State Regulations

# **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

# **U.S. State Right-to-Know Regulations**

| Chemical name     | New Jersey | Massachusetts | Pennsylvania |
|-------------------|------------|---------------|--------------|
| Hydrochloric acid | X          | X             | X            |

# U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

# 16. Other information

NFPA<br/>HMISHealth hazards3Flammability0Instability0Special hazards-HMISHealth hazards3Flammability0Physical hazards0Personal protectionX

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

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

Agency for Toxic Substances and Disease Registry (ATSDR)

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)

National Institute of Technology and Evaluation (NITE)

Australia 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 Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

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

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

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date 21-Jun-2024

**Revision Note** No information available.

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**