# Safety Data Sheet

# Hydrochloric Acid ACS Premium Trace

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Hydrochloric Acid ACS Premium Trace

**Synonyms/Generic Names:** None

**Product Number:** 2525

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer:** Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

**For More Information:** 920-623-2140 (Monday-Friday 8:00-4:30)
www.columbuschemical.com

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

## 2. HAZARDS IDENTIFICATION

**Hazard Not Otherwise Classified (HNOC):** None

**Target Organ(s):** Kidneys, liver, mucous membranes, upper respiratory tract, skin, eyes, circulatory system, teeth

**Signal Words:** Danger

**Pictograms:**

**GHS Classification:**

| | |
|---|---|
| Corrosive to metals | Category 1 |
| Skin corrosion | Category 1B |
| Serious eye damage | Category 1 |
| Specific target organ toxicity-single exposure | Category 3 |

**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

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

**Precautionary Statements:**

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|---|---|
| P234 | Keep only in original container. |
| P260 | Do not breathe dust/fume/gas/mist/vapors/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. |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do not induce vomiting. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| 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/doctor/physician. |
| P363 | Wash contaminated clothing before reuse. |
| P390 | Absorb spillage to prevent material-damage. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P406 | Store in corrosive resistant container with a resistant liner. |
| P501 | Dispose of contents/container in accordance with local regulations. |

**Potential Health Effects**

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|---|---|
| **Eyes** | Causes eye burns. |
| **Inhalation** | Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. |
| **Skin** | Harmful if absorbed through skin. Causes skin burns. |
| **Ingestion** | Harmful if swallowed. |

**NFPA Ratings**

| | |
|---|---|
| **Health** | 3 |
| **Flammability** | 0 |
| **Reactivity** | 1 |
| **Specific hazard** | Not Available |

**HMIS Ratings**

| | |
|---|---|
| **Health** | 3 |
| **Fire** | 0 |
| **Reactivity** | 1 |

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | Weight % | CAS # | EINECS# / ELINCS# | Formula | Molecular Weight |
|---|---|---|---|---|---|
| Hydrochloric Acid | 36-40 | 7647-01-0 | 231-595-7 | HCl | 36.46 g/mol |
| Water | Balance | 7732-18-5 | 231-791-2 | $H_2O$ | 18.00 g/mol |

## 4. FIRST-AID MEASURES

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|---|---|
| **Eyes** | Immediately rinse with plenty of water for at least 15 minutes and seek medical attention immediately. |
| **Inhalation** | Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately. |
| **Skin** | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately. |
| **Ingestion** | **Do Not Induce Vomiting!** Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately. |

## 5. FIRE-FIGHTING MEASURES

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|---|---|
| **Suitable (and unsuitable) extinguishing media** | Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water. |
| **Special protective equipment and precautions for firefighters** | Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. |
| **Specific hazards arising from the chemical** | Emits toxic (hydrogen chloride gas) fumes under fire conditions. (See also Stability and Reactivity section). |

## 6. ACCIDENTAL RELEASE MEASURES

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|---|---|
| **Personal precautions, protective equipment and emergency procedures** | See section 8 for recommendations on the use of personal protective equipment. |
| **Environmental precautions** | Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements. |
| **Methods and materials for containment and cleaning up** | Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations. |

## 7. HANDLING AND STORAGE

**Precautions for safe handling**
See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

**Conditions for safe storage, including any incompatibilities**
Store in a cool, dry, well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational exposure controls:**

| Component | Exposure Limits | Basis | Entity |
|---|---|---|---|
| Hydrogen Chloride | 2 ppm<br>2.98 mg/m$^3$ | CEIL | ACGIH |
| | 5 ppm<br>7 mg/m$^3$ | CEIL | OSHA |
| | 5 ppm<br>7 mg/m$^3$ | CEIL | NIOSH |
| | 50 ppm | IDLH | OSHA |

TWA: Time Weighted Average over 8 hours of work.
TLV: Threshold Limit Value over 8 hours of work.
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels
CEIL: Ceiling

**Personal Protection**

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|---|---|
| **Eyes** | Wear chemical safety glasses or goggles, and face shield. |
| **Inhalation** | Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator. |
| **Skin** | Wear nitrile or rubber gloves, and full body suit. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| **Other** | Not Available |

**Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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|---|---|
| Appearance (physical state, color, etc.) | Clear, colorless to light yellow liquid. |
| Odor | Strong, pungent odor. |
| Odor threshold | 0.25-10 ppm |
| pH | Acidic. |
| Melting point/freezing point | -30°C (-22°F) |
| Initial boiling point and boiling range | 50.5°C (122.9°F) |
| Flash point | Not Flammable |
| Evaporation rate | Not Available |
| Flammability (solid, gas) | Not Flammable |
| Upper/lower flammability or explosive limit | Not Explosive |
| Vapor pressure | 227 hPa (170 mmHg) at 21.1°C (70°F)<br>547 hPa (410 mmHg) at 37.7°C (99.9°F) |
| Vapor density | 1.267 (air=1) |
| Specific gravity | 1.18 (water = 1) |
| Solubility (ies) | Soluble in water, diethyl ether. |
| Partition coefficient: n-octanol/water | Not Available |
| Auto-ignition temperature | Not Available |
| Decomposition temperature | Not Available |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Chemical Stability** | Stable |
| **Possibility of Hazardous Reactions** | Will not occur. |
| **Conditions to Avoid** | Uncontrolled additions of water. |
| **Incompatible Materials** | Metals, oxidizing agents, organic materials, alkalis, water. |
| **Hazardous Decomposition Products** | Hydrogen chloride gas. |

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**

| | |
|---|---|
| **Skin** | Not Available |
| **Eyes** | Not Available |
| **Respiratory** | Not Available |
| **Ingestion** | LD50 – Rabbit – 900 mg/kg |

**Carcinogenicity**

| | |
|---|---|
| **IARC** | 3: Not classifiable as to its carcinogenicity to humans (hydrochloric acid). |
| **ACGIH** | A4: Not classifiable as a human carcinogen (hydrochloric acid). |

| | |
|---|---|
| **NTP** | No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| **OSHA** | No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Signs & Symptoms of Exposure**

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|---|---|
| **Skin** | Irritation and burns. |
| **Eyes** | Severe eye irritation, conjunctivitis, burns, corneal necrosis. |
| **Respiratory** | Irritation, pain, inflammation of upper respiratory tract and mucous membranes, coughing, sneezing, choking. |
| **Ingestion** | Irritation, burning, ulceration, fever, vomiting, nausea, diarrhea, thirst, difficulty swallowing, salivation. |

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|---|---|
| **Chronic Toxicity** | May damage organs. |
| **Teratogenicity** | Not Available |
| **Mutagenicity** | May alter genetic material. |
| **Embryotoxicity** | Not Available |
| **Target Organ(s)** | Kidneys, liver, mucous membranes, upper respiratory tract, skin, eyes, circulatory system, teeth. |
| **Reproductive Toxicity** | Not Available |
| **Respiratory/Skin Sensitization** | Not Available |

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

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|---|---|
| **Aquatic Vertebrate** | LC50 – Gambusia affinis – 282 mg/L – 96h |
| **Aquatic Invertebrate** | Not Available |
| **Terrestrial** | Not Available |

| | |
|---|---|
| **Persistence and Degradability** | Not Available |
| **Bioaccumulative Potential** | Not Available |
| **Mobility in Soil** | Not Available |
| **PBT and vPvB Assessment** | Not Available |
| **Other Adverse Effects** | Not Available |

## 13. DISPOSAL CONSIDERATIONS

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|---|---|
| **Waste Product or Residues** | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue. |
| **Product Containers** | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container. |

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

## 14. TRANSPORTATION INFORMATION

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| US DOT | UN1789, Hydrochloric acid, 8, pg II |
| TDG | UN1789, HYDROCHLORIC ACID, 8, PG II |
| IMDG | UN1789, HYDROCHLORIC ACID, 8, PG II |

| | |
|---|---|
| Marine Pollutant | No |
| IATA/ICAO | UN1789, Hydrochloric acid, 8, pg II |

## 15. REGULATORY INFORMATION

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|---|---|
| TSCA Inventory Status | All ingredients are listed on the TSCA Active inventory. |
| DSL / NDSL | All ingredients are listed on the DSL inventory. |
| California Proposition 65 | Not Listed |
| Rhode Island: Hazardous Substance List | Listed: Hydrochloric Acid |
| Massachusetts: Toxic or Hazardous Substance List, Right to Know | Listed: Hydrochloric Acid |
| Pennsylvania: Hazardous Substance List | Listed: Hydrochloric Acid |
| New Jersey: Right to Know Hazardous Substance List | Listed: Hydrochloric Acid |
| SARA 302 | Not Listed |
| SARA 304 | Not Listed |
| SARA 311 | Reactive Hazard, Acute Health Hazard, Chronic Health Hazard |
| SARA 312 | Reactive Hazard, Acute Health Hazard, Chronic Health Hazard |
| SARA 313 | Not Listed |
| WHMIS Canada | Class D1A: Poisonous and infectious material – Immediate and serious effects – Very toxic.<br>Class E: Corrosive material. |

## 16. OTHER INFORMATION

| Revision | Date |
|---|---|
| Original | 08/08/2018 |
| Revision 1 | 02/07/2022 |
| | |
| | |

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