

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Hydrochloric Acid 37% (HCL 37%) - Technical Grade
Synonyms: hydrogen chloride, Hydrochloric Acid (HCL)
CAS Number: 7647-01-0
Grade/Purity: Technical Grade
Product Type: Acids
Product Use: Industrial, Manufacturing or Laboratory use
Manufacturer/Supplier: Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574
Information: 512-365-6838 | www.alliancechemical.com
Emergency: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Word: Danger

GHS Pictograms:



Hazard Statements:

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|------|--|
| H314 | Causes severe skin burns and eye damage [Danger Skin corrosion/irritation] |
| H331 | Toxic if inhaled [Danger Acute toxicity, inhalation] |

Precautionary Statements:

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|-------|--|
| P260, | P261, P264, P271, P280, P301+P330+P331, P302+P361+P354, P304+P340, P305+P354+P338, P316, P321, P363, P403+P233, P405, and P501 |
|-------|--|

3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT | WEIGHT % | CAS # | EINECS# / ELINCS# | FORMULA | MOLECULAR WEIGHT |
|--------------------------|----------|-----------|-------------------|------------------|------------------|
| Hydrochloric Acid (HCL) | 37% w/w | 7647-01-0 | 231-595-7 | ClH | 36.46 g/mol |
| Water | 63% | 7732-18-5 | 231-791-2 | H ₂ O | 18.02 g/mol |

4. FIRST-AID MEASURES

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|-------------------|---|
| Eyes | EYES: immediately flush with plenty of water for at least 15 min. and get medical attention; continue flushing for another 15 min. if physician does not arrive promptly. |
| Skin | SKIN: immediately flush skin while removing contaminated clothing; get medical attention promptly; use soap and wash area for at least 15 min. (USCG, 1999) |
| Inhalation | INHALATION: remove person to fresh air; keep him warm and quiet and get medical attention immediately; start artificial respiration if breathing stops. |
| Ingestion | INGESTION: have person drink water or milk; do NOT induce vomiting. |

5. FIRE-FIGHTING MEASURES

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| Suitable Media | Dry chemical, CO ₂ , water spray. Use water spray to cool containers. |
| Unsuitable Media | Do not use a solid water stream as it may scatter and spread fire. |
| Protective Equipment | Wear self-contained breathing apparatus and full protective clothing. |
| Combustion Products | May include carbon oxides and other toxic fumes. See Section 10. |

6. ACCIDENTAL RELEASE MEASURES

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| Personal Precautions | Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas. |
| Environmental | Prevent leakage or spillage from entering drains, sewers, or waterways. |
| Containment & Cleanup | Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations. |

7. HANDLING AND STORAGE

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| Safe Handling | Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use. |
| Safe Storage | Store in a cool, dry, well-ventilated area. Use corrosion-resistant containers. Keep away from incompatible materials (see Section 10). Keep containers tightly closed. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

Occupational Exposure Limits:

No established occupational exposure limits.

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|-------------------|---|
| Eyes | Wear chemical safety goggles or face shield. |
| Skin | Wear chemical-resistant gloves and protective clothing. |
| Inhalation | Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs. |

9. PHYSICAL AND CHEMICAL PROPERTIES

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|--------------------------|-------------------------------------|
| Appearance | Colorless, fuming liquid |
| Odor | Characteristic |
| pH | Not Available |
| Melting Point | -114°C (-173.2°F) |
| Boiling Point | 108°C (226.4°F) |
| Flash Point | Not Available |
| Vapor Pressure | Not Available |
| Specific Gravity | 1.19 |
| Solubility | Highly soluble in water and ethanol |
| Molecular Formula | ClH |
| Molecular Weight | 36.46 g/mol |

10. STABILITY AND REACTIVITY

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|-------------------------------|---|
| Chemical Stability | Stable under recommended storage conditions. |
| Hazardous Reactions | None under normal processing conditions. |
| Conditions to Avoid | Heat, sparks, open flame, and incompatible materials. |
| Incompatible Materials | Strong acids, strong bases, reactive metals, water (for some concentrated forms). |
| Decomposition Products | May produce carbon oxides and other toxic fumes when heated to decomposition. |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

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| IARC | Not listed as carcinogen. |
| NTP | Not listed as carcinogen. |
| OSHA | Not listed as carcinogen. |

12. ECOLOGICAL INFORMATION

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|-------------------------|---|
| Ecotoxicity | Data not available. Avoid release to the environment. |
| Persistence | Not Available |
| Bioaccumulation | Not Available |
| Mobility in Soil | Not Available |

13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14. TRANSPORT INFORMATION

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|-------------------------|---|
| US DOT | UN1789, HYDROCHLORIC ACID, 8, PG II |
| IMDG | UN1789, HYDROCHLORIC ACID, 8, PG II, Tunnel (E) |
| IATA/ICAO | UN1789, HYDROCHLORIC ACID, 8, PG II Passenger: 1 L (PI 851); Cargo only: 30 L (PI 855) |
| Marine Pollutant | No |

15. REGULATORY INFORMATION

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| TSCA Inventory | All ingredients are listed on the TSCA Active inventory. |
| California Prop 65 | Refer to California Proposition 65 list for current status. |
| SARA 311/312 | See Section 2 for hazard classifications. |
| SARA 313 | Refer to EPA Toxic Release Inventory for current listing status. |

16. OTHER INFORMATION

Revision Date: 03/31/2026

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