# Hydrogen Chloride

**Description**
Formula: HCl

**Gas Data**
Molecular Weight: 36.46
Density: 1.50 kg/m³ @ 25°C, 101.325 kPa
Specific Volume: 0.662 m³/kg @ 21.1°C, 101.325 kPa

**Safety Information**
Permissible Exposure Limit (TLV): 5 ppm

**Shipping Information**
CAS Registry Number: 7647-01-0
UN Number: UN 1050
ECCN Number: EAR99
DOT Proper Shipping Name: Hydrogen Chloride, Anhydrous
DOT Classification: 2.3, Hazard Zone C (gas poisonous by inhalation)
DOT Label: INHALATION HAZARD CORROSIVE GAS
TC Shipping Name: Hydrogen Chloride, Anhydrous
TC Classification: 2.3, 8
TC Label: POISON GAS, CORROSIVE GAS

## Cylinder Specifications

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<th>Cylinder Size</th>
<th>Valve Outlet CGA No.</th>
<th>Pressure psig @ 70°F</th>
<th>Pressure kPa @ 21.1°C</th>
<th>Approximate Ship Weight lb</th>
<th>Approximate Ship Weight kg</th>
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## Gas Grade Purity Specifications

### Hydrogen Chloride, Research Purity 99.999%

- **Guaranteed Specifications**
  - Carbon Dioxide < 4 ppm
  - Carbon Monoxide < 1 ppm
  - Iron < 0.5 ppm
  - Methane < 1 ppm
  - Nitrogen < 2 ppm
  - Oxygen < 1 ppm
  - Water < 1 ppm

### Hydrogen Chloride, Matheson Purity 99.995%

- **Guaranteed Specifications**
  - Carbon Dioxide < 10 ppm
  - Methane < 2 ppm
  - Oxygen < 4 ppm
  - Water < 10 ppm

### Hydrogen Chloride, UHP 99.5%

- **Guaranteed Specifications**
  - Oxygen < 100 ppm
  - THC < 60 ppm

### Hydrogen Chloride, Technical Purity 99%

- **Guaranteed Specifications**
  - Oxygen < 100 ppm
  - THC < 60 ppm

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**Liquid phase, weight/weight%**

A Certificate of Conformance will be provided on request.
Recommended shelf life — 6 months.

*Except LB*