

Hydrogen Chloride

Description

Formula: HCl

Gas Data


Molecular Weight: 36.46
 Density: 1.50 kg/m³ @ 25°C, 101.325 kPa
 0.094 lb/ft³ @ 70°F, 14.696 psia
 Specific Volume: 0.662 m³/kg @ 21.1°C, 101.325 kPa
 10.6 ft³/lb @ 70°F, 14.696 psia

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

Cylinder Size	Valve Outlet CGA No.	Pressure psig @ 70°F	Pressure kPa @ 21.1°C	Approximate Ship Weight	
				lb	kg
1T	330	613	4,226	1910	866
1A	330	613	4,226	192	87
2	330	613	4,226	94	43
3	330	613	4,226	47	22
4	330	613	4,226	24	11
LB	180	613	4,226	6	3
QI	330/634	613	4,226	1910	866
QK	330/634	613	4,226	210	95
QF	330/634	613	4,226	187	85
GF	330/634	613	4,226	94	43
UF	330/634	613	4,226	47	21

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Metric	Equipment Recommendations	Model No.	
Hydrogen Chloride, Research Purity 99.999% <i>Guaranteed Specifications</i>	G2148326	QK	60 lb	27.22 kg	Single Stage Reg. Cross Purge Leak Detector Leak Detector Detector Tube Cyl. Valve Wrench	Series 3210A-330 4775-330 8057 8081A 8014-1735B TW-2	
	G2148323	QF	55 lb	24.95 kg			
	Carbon Dioxide < 4 ppm	G2148343	GF	20 lb			9.07 kg
	Carbon Monoxide < 1 ppm	G2148355	UF	8 lb			3.63 kg
	Iron < 0.5 ppm						
	Methane < 1 ppm						
	Nitrogen < 2 ppm						
	Oxygen < 1 ppm						
Water < 1 ppm							
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
Hydrogen Chloride, Matheson Purity 99.995% <i>Guaranteed Specifications</i>	G1851633	QI	600 lb	272.16 kg	Single Stage Reg. L B Regulator Cross Purge Leak Detector Leak Detector Detector Tube Cyl. Valve Wrench	Series 3210A-330 3330-180 4775-330 8057 8081A 8014-1735B TW-2*	
	G1851623	QF	55 lb	24.95 kg			
	Carbon Dioxide < 10 ppm	G1851643	GF	20 lb			9.07 kg
	Methane < 2 ppm	G1851655	UF	8 lb			3.63 kg
	Nitrogen < 10 ppm	G1851675	LB	0.5 lb			227 gm
	Oxygen < 4 ppm						
	Water < 10 ppm						
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<i>*Except LB</i>							
Hydrogen Chloride, UHP 99.5% <i>Guaranteed Specifications</i>	G2670736	1L	65 lb	29.50 kg	Single Stage Reg. L B Regulator Cross Purge Leak Detector Leak Detector Detector Tube Cyl. Valve Wrench	Series 3210A-330 3330-180 4775-330 8057 8081A 8014-1735B TW-2*	
	G2670496	1A	60 lb	27.22 kg			
	Oxygen < 100 ppm						
THC < 60 ppm							
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
Hydrogen Chloride, Technical Purity 99%	G1531120	1T	600 lb	272.16 kg	Single Stage Reg. L B Regulator Cross Purge Leak Detector Leak Detector Detector Tube Cyl. Valve Wrench	Series 3210A-330 Series 3330-180 4775-330 8057 8081A 8014-1735B TW-2*	
	G1531101	1A	60 lb	27.22 kg			
	G1531140	2	20 lb	9.07 kg			
	G1531150	3	8 lb	3.63 kg			
	G1531165	4	2 lb	0.91 kg			
	G1531175	LB	0.5 lb	227 gm			

Liquid phase, weight/weight%

A Certificate of Conformance will be provided on request.

Recommended shelf life — 6 months.

*Except LB

⚠ WARNING: This product can expose you to chemicals including Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.