



## Hydrogen Fluoride

## Description

Synonym: Anhydrous Hydrofluoric Acid  
Formula: HF


## Gas Data

Molecular Weight: 20.01  
Density: 0.833 kg/m<sup>3</sup> @ 21.1°C, 101.325 kPa  
0.0518 lb/ft<sup>3</sup> @ 70°F, 14.696 psia  
Specific Volume: 1.20 m<sup>3</sup>/kg @ 21.1°C, 101.325 kPa  
19.3 ft<sup>3</sup>/lb @ 70°F, 14.696 psia

## Safety Information

Permissible Exposure Limit (TLV): 3 ppm  
Property Statement: Incompatible with some metals, concrete, glass and ceramics

## Shipping Information

CAS Registry Number: 7664-39-3  
UN Number: UN 1052  
ECCN Number: 1C350  
DOT Proper Shipping Name: Hydrogen Fluoride, Anhydrous  
DOT Classification: 8, Hazard Zone C (gas poisonous by inhalation)  
DOT Label: INHALATION HAZARD   
POISON, CORROSIVE  
TC Shipping Name: Hydrogen Fluoride, Anhydrous  
TC Classification: 8, 6.1  
TC Label: POISON, CORROSIVE

## Cylinder Specifications

Cylinder Size	Valve Outlet CGA No.	Pressure		Approximate Ship Weight	
		psia @ 70°F	kPa @ 21.1°C	lb	kg
1V	660	15.3	105	197	89
2L	660	15.3	105	99	45
3L	660	15.3	105	48	22
4	660	15.3	105	26	12
LB	180	15.3	105	6	3

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Metric	Equipment Recommendations	Model No.	Page No.
Hydrogen Fluoride, Ultra High Purity 99.99%	G1534122	1V	100 lb	45.36 kg	Manual Control Valve	55A-660	417
	G1534145	2	25 lb	11.34 kg	LB Control Valve	4333	416
	G1534150	3	9 lb	4.08 kg	Cross Purge	4775-660	422
	G1534165	4	3.5 lb	1.59 kg	Personal Monitor	IQ250	398
	G1534175	LB	0.5 lb	227 gm	Leak Detector	8081A	404
					Detector Tube	8014-156S	392
					Cyl. Valve Wrench	TW-2*	430
<i>Standard items include a FLET and 100 psi N<sub>2</sub> pressure pad. A lot analysis is available on request. Please inquire for individual cylinder analysis. * Except LB</i>							
Hydrogen Fluoride, CP Grade 99.0%	G1534322	1V	100 lb	45.36 kg	Manual Control Valve	55A-660	417
	G1534345	2	25 lb	11.34 kg	LB Control Valve	4333	416
	G1534356	3	9 lb	4.08 kg	Tee Purge	4756-660	423
	G1534365	4	3.5 lb	1.59 kg	Personal Monitor	IQ250	398
	G1534375	LB	0.5 lb	227 gm	Leak Detector	8081A	404
					Detector Tube	8014-156S	392
					Cyl. Valve Wrench	TW-2*	430
<i>Standard items include a FLET and 100 psi N<sub>2</sub> pressure pad. A Certificate of Conformance will be provided on request. A lot analysis is available at a nominal charge. *Except LB</i>							