



## Hydrogen Sulfide

## Description

Synonyms: Hydrogen Sulphide, Hydrosulfuric Acid  
Formula: H<sub>2</sub>S


## Gas Data

Molecular Weight: 34.08  
Density: 1.411 kg/m<sup>3</sup> @ 21.1°C, 101.325 kPa  
0.0881 lb/ft<sup>3</sup> @ 70°F, 14.696 psia  
Specific Volume: 0.7087 m<sup>3</sup>/kg @ 21.1°C, 101.325 kPa  
11.35 ft<sup>3</sup>/lb @ 70°F, 14.696 psia

## Safety Information

LFL in Air: 4%  
UFL in Air: 44%  
Permissible Exposure Limit (TLV): 10 ppm

## Shipping Information

CAS Registry Number: 7783-06-4  
UN Number: UN 1053  
ECCN Number: EAR99  
DOT Proper Shipping Name: Hydrogen Sulfide  
DOT Classification: 2.3, Hazard Zone B (gas poisonous by inhalation)  
DOT Label: INHALATION HAZARD  FLAMMABLE GAS  
TC Shipping Name: Hydrogen Sulphide, Liquefied  
TC Classification: 2.3, 2.1  
TC Label: POISON GAS, FLAMMABLE 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	252	1,737	2282	1037
1A	330	252	1,737	192	87
2	330	252	1,737	96	44
3	330	252	1,737	48	22
4	330	252	1,737	25	11
LB	180	252	1,737	6	3

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Metric	Equipment Recommendations	Model No.	Page No.
<b>Hydrogen Sulfide, Research Grade, 99.9%</b> <i>Guaranteed Specifications (in Vol %)</i>	G2690117	1A	60 lb	27.22 kg	Single Stage Reg.	Series 3610A-330	316
	G2690118	2	22 lb	10 kg	LB Regulator	Series 3570-180	314
	G2679556	3	9 lb	4.1 kg	Cross Purge	4774-330	422
					Personal Monitor	IQ250	398
Carbon Dioxide ≤ 0.01%				Leak Detector	8057	402	
Carbon Disulfide ≤ 0.02%				Leak Detector	8081A	404	
Carbonyl Sulfide ≤ 0.06%				Detector Tube	8014-120SD	392	
Nitrogen ≤ 0.01%				Cyl. Valve Wrench	TW-2*	430	
Total Hydrocarbons ≤ 0.01%							
<i>A Certificate of Conformance available on request. A Certificate of Analysis available at nominal charge. *Except LB</i>							
<b>Hydrogen Sulfide, CP Grade 99.5%</b> <i>Guaranteed Specifications (in Vol %)</i>	G1540220	1T	1055 lb	480 kg	Single Stage Reg.	Series 3610A-330	316
	G1540201	1A	60 lb	27.22 kg	LB Regulator	Series 3570-180	314
	G1540240	2	22 lb	9.98 kg	Cross Purge	4774-330	422
	G1540250	3	9 lb	4.08 kg	Tee Purge	4754-330	423
	G1540265	4	2.75 lb	1.25 kg	Personal Monitor	IQ250	398
	G1540175	LB	0.5 lb	227 gm	Leak Detector	8057	402
					Leak Detector	8081A	404
					Detector Tubes	8014-120SD	392
				Cyl. Valve Wrench	TW-2*	430	
<i>A Certificate of Conformance available on request.* A Certificate of Analysis available at nominal charge. *Except LB</i>							

⚠WARNING: This product can expose you to chemicals including Carbon Disulfide, 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](http://www.P65Warnings.ca.gov).