



Hydrogen Sulfide

Description

Synonyms: Hydrogen Sulphide, Hydrosulfuric Acid
Formula: H₂S


Gas Data

Molecular Weight: 34.08
Density: 1.411 kg/m³ @ 21.1°C, 101.325 kPa
0.0881 lb/ft³ @ 70°F, 14.696 psia
Specific Volume: 0.7087 m³/kg @ 21.1°C, 101.325 kPa
11.35 ft³/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		Equipment Recommendations	Model No.	Page No.			
			US	Metric						
Hydrogen Sulfide, Research Grade, 99.9%	G2690117	1A	60 lb	27.22 kg	Single Stage Reg. LB Regulator Cross Purge Personal Monitor Leak Detector Leak Detector Detector Tube Cyl. Valve Wrench	Series 3610A-330 Series 3570-180 4774-330 IQ250 8057 8081A 8014-120SD TW-2*	316 314 422 398 402 404 392 430			
	G2690118	2	22 lb	10 kg						
	G2679556	3	9 lb	4.1 kg						
	<i>Guaranteed Specifications (in Vol %)</i>									
Carbon Dioxide	≤ 0.01%									
Carbon Disulfide	≤ 0.02%									
Carbonyl Sulfide	≤ 0.06%									
Nitrogen	≤ 0.01%									
Total Hydrocarbons	≤ 0.01%									
<i>A Certificate of Conformance available on request.</i>										
<i>A Certificate of Analysis available at nominal charge.</i>										
<i>*Except LB</i>										
Hydrogen Sulfide, CP Grade 99.5%	G1540220	1T	1055 lb	480 kg	Single Stage Reg. LB Regulator Cross Purge Tee Purge Personal Monitor Leak Detector Leak Detector Detector Tubes Cyl. Valve Wrench	Series 3610A-330 Series 3570-180 4774-330 4754-330 IQ250 8057 8081A 8014-120SD TW-2*	316 314 422 423 398 402 404 392 430			
	G1540201	1A	60 lb	27.22 kg						
	G1540240	2	22 lb	9.98 kg						
	G1540250	3	9 lb	4.08 kg						
	G1540265	4	2.75 lb	1.25 kg						
	G1540175	LB	0.5 lb	227 gm						
	<i>Guaranteed Specifications (in Vol %)</i>									
	Carbon Dioxide	≤ 0.05%								
	Carbon Disulfide	≤ 0.1%								
	Carbonyl Sulfide	≤ 0.2%								
Nitrogen	≤ 0.01%									
Total Hydrocarbons	≤ 0.3%									
<i>A Certificate of Conformance available on request.*</i>										
<i>A Certificate of Analysis available at nominal charge.</i>										
<i>*Except LB</i>										