



## Carbon Monoxide

## Description

Synonym: Carbon Oxide  
Formula: CO


## Gas Data

Molecular Weight: 28.01  
Density: 1.16 kg/m<sup>3</sup> @ 21.1°C, 101.325 kPa  
0.0725 lb/ft<sup>3</sup> @ 70°F, 14.696 psia  
Specific Volume: 0.862 m<sup>3</sup>/kg @ 21.1°C, 101.325 kPa  
13.8 ft<sup>3</sup>/lb @ 70°F, 14.696 psia

## Safety Information

LFL in Air: 12.5%  
UFL in Air: 74%  
Permissible Exposure Limit (TLV): 25 ppm

## Shipping Information

CAS Registry Number: 630-08-0  
UN Number: UN 1016  
ECCN Number: 1C980  
DOT Proper Shipping Name: Carbon Monoxide, Compressed  
DOT Classification: 2.3, Hazard Zone D (gas poisonous by inhalation)  
DOT Label: INHALATION HAZARD   
FLAMMABLE GAS  
TC Shipping Name: Carbon Monoxide, Compressed  
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
1A	350	1,650	11,376	145	66
1R	350	1,650	11,376	58	26
2	350	1,650	11,376	69	31
2R	350	1,650	11,376	36	16
3	350	1,650	11,376	31	14
3R	350	1,650	11,376	18	8
6A	180	1,500	10,342	2	1
LB	170	1,500	10,342	4	2

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Metric	Equipment Recommendations	Model No.	Page No.
<b>Carbon Monoxide, Research Purity 99.999%</b>	G2119118	1R	117 ft <sup>3</sup>	3.31 m <sup>3</sup>	Dual Stage Reg. Single Stage Reg. Cross Purge Personal Monitor Leak Detector Detector Tube Cyl. Valve Wrench	Series 3810-350 Series 3610A-350 4774-350 IQ250 8081A 8014-106S TW-5	318 316 422 398 404 391 4
<i>Guaranteed Specifications</i>	G2119147	2R	62 ft <sup>3</sup>	1.8 m <sup>3</sup>			
Carbon Dioxide < 2 ppm	G2119159	3R	23 ft <sup>3</sup>	0.7 m <sup>3</sup>			
Methane < 2 ppm	G2119172	6A	3.06 ft <sup>3</sup>	86.6 L			
Nitrogen/Argon < 5 ppm							
Oxygen < 2 ppm							
Water < 2 ppm							
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<b>Carbon Monoxide, Matheson Purity 99.99%</b>	G1821101	1A	175 ft <sup>3</sup>	4.96 m <sup>3</sup>	Dual Stage Reg. Single Stage Reg. Tee Purge Personal Monitor Leak Detector Detector Tube Cyl. Valve Wrench	Series 3120-350 Series 3530-350 4753-350 IQ250 8081A 8014-106S TW-5	299 313 423 398 404 391 430
<i>Guaranteed Specifications</i>	G1821140	2	66 ft <sup>3</sup>	1.87 m <sup>3</sup>			
Nitrogen/Argon < 80 ppm	G1821150	3	26 ft <sup>3</sup>	0.74 m <sup>3</sup>			
Oxygen < 5 ppm							
Methane < 10 ppm							
Water < 4 ppm							
<i>NOTE: In Aluminum cylinders Carbon Dioxide &lt; 10ppm</i>							
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<b>Carbon Monoxide, Ultra High Purity 99.9%</b>	G1918701	1A	175 ft <sup>3</sup>	4.96 m <sup>3</sup>	Dual Stage Reg. Single Stage Reg. LB Regulator Tee Purge Personal Monitor Leak Detector Detector Tube Cyl. Valve Wrench	Series 1250-350 Series 3530-350 Series 3550-170 4753-350 IQ250 8081A 8014-106S TW-5	296 313 314 423 398 404 391 430
<i>Guaranteed Specifications</i>	G1918740	2	66 ft <sup>3</sup>	1.87 m <sup>3</sup>			
Nitrogen/Argon < 900 ppm	G1918750	3	26 ft <sup>3</sup>	0.74 m <sup>3</sup>			
Oxygen < 10 ppm	G1918775	LB	1.5 ft <sup>3</sup>	44 L			
Methane < 50 ppm							
Water < 5 ppm							
<i>NOTE: In Aluminum cylinders Carbon Dioxide &lt; 50ppm</i>							
<i>A Certificate of Conformance will be provided on request.</i>							
<i>A lot analysis is available at a nominal charge.</i>							



## Carbon Monoxide (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content		Equipment Recommendations	Model No.	Page No.
			US	Metric			
Carbon Monoxide, CP Grade 99.5%	G1132212	1L	236 ft <sup>3</sup>	6.68 m <sup>3</sup>	Dual Stage Reg.	Series 81-350	293
	G1132201	1A	175 ft <sup>3</sup>	4.96 m <sup>3</sup>	Single Stage Reg.	Series 18-350	292
	G1132240	2	66 ft <sup>3</sup>	1.87 m <sup>3</sup>	LB Regulator	Series 3320-170	302
	G1132250	3	26 ft <sup>3</sup>	0.74 m <sup>3</sup>	Tee Purge	4753-350	423
	G1132275	LB	1.5 ft <sup>3</sup>	44 L	Personal Monitor	IQ250	398
					Leak Detector	8081A	404
					Detector Tube	8014-106S	391
					Cyl. Valve Wrench	TW-5	430
<i>A Certificate of Conformance will be provided on request.</i>							
Carbon Monoxide, Technical Purity 99%	G1132112	1L	236 ft <sup>3</sup>	6.68 m <sup>3</sup>	Dual Stage Reg.	Series 81-350	293
	G1132101	1A	175 ft <sup>3</sup>	4.96 m <sup>3</sup>	Single Stage Reg.	Series 18-350	292
	G1132140	2	66 ft <sup>3</sup>	1.87 m <sup>3</sup>	LB Regulator	Series 3320-170	302
	G1132150	3	26 ft <sup>3</sup>	0.74 m <sup>3</sup>	Tee Purge	4753-350	423
	G1132175	LB	1.5 ft <sup>3</sup>	44 L	Personal Monitor	IQ250	398
					Leak Detector	8081A	404
					Detector Tube	8014-106S	391
					Cyl. Valve Wrench	TW-5	430
<i>A Certificate of Conformance will be provided on request.</i>							