



# 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>							

⚠ 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](http://www.P65Warnings.ca.gov).