

# Carbon Monoxide CO

Giga Class Grade: 99.997+%



## Description

Carbon Monoxide is used in a variety of applications including silicon-nitride-over-silicon etch to increase selectivity, as a source of oxygen in oxidation, and as a source of carbon in certain doping processes. Carbon Monoxide is a colorless, odorless, flammable toxic gas with a TLV of 25 ppm. Carbon Monoxide is stable with respect to decomposition.

Physical Constants	
Chemical formula	CO
Molecular weight	28.010
Specific volume @ +70°F (+21.1°C)	13.81 ft <sup>3</sup> /lb, 0.86 m <sup>3</sup> /kg
Flammability range	12.5% to 74.2% in air
Critical pressure	507.47 psia, 34.99 bar
Critical temperature	-220.4°F, -140.2°C
Specific gravity @ 70°F, 1 atm (Air=1)	0.967

Maximum Impurities	
COMPONENT	CONCENTRATION (ppmv)
Carbon Dioxide	<10.0
Hydrogen	<1.0
Iron Pentacarbonyl	<0.5
Moisture	<1.0
Nickel Tetracarbonyl	<1.0
Nitrogen	<10.0
Oxygen	<0.5
THC (as Methane)	<0.5

Cylinder Specifications*			Contents		Pressure	
Cylinder	Valve Outlet Options		SCF	Liters	PSIG	BAR
2A	CGA 350	DISS 724	140	4000	2000	139
4A	CGA 350	DISS 724	28	800	2000	139

\*Additional cylinder sizes and/or valve outlets are available.

[www.spectragases.com](http://www.spectragases.com)

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