



CARBON MONOXIDE

2 COMPONENT MIXTURES

CARBON MONOXIDE BALANCE AIR

Concentration*	Cylinder Size	Volume (ft ³)	CGA	Mixture Grades Available	Equipment Recommended
1 ppm – 50%	DA	146	590	EPA Protocol ¹	400 Series regulator
	QA	84		Primary Lab Master	
	GA	32		Certified Lab Master	
	K	200		Primary Standard	
	Q	67		Certified Standard	
	G	34		Uncertified	
D.O.T. Proper Shipping Name:		Compressed gas, n.o.s., (Air, Carbon Monoxide)			
I.D. Number:		UN1956			
Hazard Class:		2.2			
Shipping Labels:		Nonflammable Gas			

CARBON MONOXIDE BALANCE ARGON

Concentration*	Cylinder Size	Volume (ft ³)	CGA	Mixture Grades Available	Equipment Recommended
1 ppm – 50%	DA	146	590	Primary Standard	400 Series regulator
	QA	84		Certified Standard	
	GA	32		Uncertified	
	K	200			
	Q	67			
	G	34			
Flammability Concentration Range:		< 11.1%		≥ 11.1%	
D.O.T. Proper Shipping Name:		Compressed gas, n.o.s., (Argon, Carbon Monoxide)		Compressed gas, flammable, n.o.s., (Argon, Carbon Monoxide)	
I.D. Number:		UN1956		UN1954	
Hazard Class:		2.2		2.1	
Shipping Labels:		Nonflammable Gas		Flammable Gas	

CARBON MONOXIDE BALANCE HELIUM

Concentration	Cylinder Size	Volume (ft ³)	CGA	Mixture Grades Available	Equipment Recommended
1 ppm – 50%	DA	146	350	Primary Standard	400 Series regulator
	QA	84		Certified Standard	
	GA	32		Uncertified	
	K	200			
	Q	67			
	G	34			
Flammability Concentration Range:		< 14.3%		≥ 14.3%	
D.O.T. Proper Shipping Name:		Compressed gas, n.o.s., (Helium, Carbon Monoxide)		Compressed gas, flammable, n.o.s., (Helium, Carbon Monoxide)	
I.D. Number:		UN1956		UN1954	
Hazard Class:		2.2		2.1	
Shipping Labels:		Nonflammable Gas		Flammable Gas	



CARBON MONOXIDE

2 COMPONENT MIXTURES

CARBON MONOXIDE BALANCE HYDROGEN

Concentration	Cylinder Size	Volume (ft ³)	CGA	Mixture Grades Available	Equipment Recommended
1 ppm – 50%	DA	146	350	Primary Standard	400 Series regulator
	QA	84		Certified Standard	
	GA	32		Uncertified	
	K	200			
	Q	67			
	G	34			
D.O.T. Proper Shipping Name:		Compressed gas, n.o.s., (Hydrogen, Carbon Monoxide)			
I.D. Number:		UN1954			
Hazard Class:		2.1			
Shipping Labels:		Flammable Gas			

CARBON MONOXIDE BALANCE NITROGEN

Concentration	Cylinder Size	Volume (ft ³)	CGA	Mixture Grades Available	Equipment Recommended
1 ppm – 50%	DA	146	350	EPA Protocol ¹	400 Series regulator
	QA	84		Primary Lab Master	
	GA	32		Certified Lab Master	
	K	200		Primary Standard	
	Q	67		Certified Standard	
	G	34		Uncertified	
Flammability Concentration Range:		< 20%		≥ 20%	
D.O.T. Proper Shipping Name:		Compressed gas, n.o.s., (Nitrogen, Carbon Monoxide)		Compressed gas, flammable, n.o.s., (Nitrogen, Carbon Monoxide)	
I.D. Number:		UN1956		UN1954	
Hazard Class:		2.2		2.1	
Shipping Labels:		Nonflammable Gas		Flammable Gas	

*Cylinder pressure and volume varies proportionately at higher concentrations.

¹ Available in aluminum cylinders only. Available concentrations for NIST Traceable mixtures to be determined by the availability of reference materials. A certification will be provided upon request for a nominal fee, except for uncertified mixtures.

TECHNICAL INFORMATION

High Pressure Cylinder:	2000 psig @ 70° Fahrenheit
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BUILD MIXTURE PART NUMBER:

To build your part number, select the code that corresponds to each section. Start with the Balance Gas, next enter the Minor Component followed by the Minor Component Concentration. Then select the Mixture Grade and finally the Cylinder Size. Add a dash “-” before the size code to complete the part number. Let’s create a part number. For example, take a Primary Standard grade of 5 ppm CARBON MONOXIDE balance NITROGEN in a size DA cylinder. From the table below we can follow the tables to come up with NI CO5MP-DA.

Balance Gas (A B)		Minor Comp Code (C D E)		Minor Component Concentration ([E] F G H I)		Mixture Grade (J)		Cylinder Size (K L)
Balance Gas	Code	Minor Gas	Code	Concentration	Code	Grade	Code	Code
Air	AI	Carbon Monoxide	CO	5 PPM to 99 PPM	5M – 99M	EPA Protocol ¹	E	DA
Argon	AR			100 PPM to 999 PPM	100 – 999	Primary Lab Master	PM	QA
Helium	HE			1,000 PPM to 9,999 PPM	1000 – 9999	Certified Lab Master	CM	GA
Hydrogen	HY			1% to 50%	1 – 50	Primary Standard	P	K
Nitrogen	NI					Certified Standard	C	Q
						Uncertified	U	G
Example Only: NI		CO		5M		P		DA