

# Carbon Monoxide. CO

# **Product information**

Carbon monoxide is used to modify dielectric etch recipes to improve selectivity and etch profile.

### Characteristics

Colorless, odorless, and toxic with the same density of air. Flammable. Produced from the incomplete oxidation of carbon.

## Physical data

Molecular weight	[g/mol]	28.01			
Boiling point	at 1.013 bar [° C]	-191.45	at 14.5 psi [° F]	-312.59	
Density	at 1.013 bar, 15° C [kg/m³]	1.185	at 1 atm., 70° F [lb/ft³]	0.072	
Vapor pressure	at 0° C [bar]	-	at 32° F [psi]	-	
	at 20° C [bar]	-	at 70° F [psi]	-	
Flammability range in	air (% volume)	10.9 - 76			

# **Product specification**

Purity grade	Typical purity	y Typical impurities [ppm]										
		N <sub>2</sub>	02	CO <sub>2</sub>	H <sub>2</sub> 0	THC	H <sub>2</sub>	CH <sub>4</sub>	C <sub>2</sub> H <sub>6</sub>	C <sub>3</sub> H <sub>8</sub>	Fe(CO)₅ [ppb]	Ni(CO) <sub>4</sub> [ppb
4.0N	≥99.99 %	≤15	≤5.0	≤50	≤7	≤1	-	-	-	-	-	-
4.5N	≥99.995 %	≤10	≤0.5	≤15	≤1	≤0.5	-	-	-	-	-	-
4.8N	≥99.998 %	≤7.5	≤0.5	≤5	≤1	≤1.5	≤1	≤0.5	≤0.5	≤0.5	≤0.1	≤0.1

Contact our team for higher grade or different specification products.

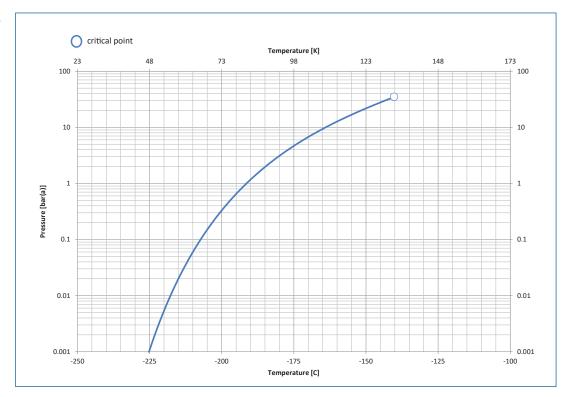
## **Shipping information**

UN number	CAS number	EC number	DOT label	Hazard labels required
1016	630-08-0	211-128-3	Poison Gas, Flammable Gas	ADR Class 2, 1TF DOT Class 2.3

### **Packaging information**

mation	Package options	Cylinder designation	Cylinder internal volume	Cylinder material	Cylinder diameter	Cylinder height to valve outlet	Cylinder tare weight	Fill contents	Pressure (psig) @ 70° F	Valve outlet	Valve material
US	Cylinder	305	46 L	Aluminum	9.8 in	53 in	98 lb	7.0 m <sup>3</sup>	2200	CGA724	SS
	Cylinder	155	29.5 L	Aluminum	8 in	49.5 in	49.5 lb	4.0 m <sup>3</sup>	2200	CGA724	SS
EU	Cylinder	40L	40L	Steel		1525 mm	42 kg	7.78 m <sup>3</sup>	200	DIN 5	SS
	Cylinder	10L	10L	Steel	140 mm	1050 mm	12 kg	1.95 m <sup>3</sup>	200	DIN 5	SS
	Bundle	40L x 12	480L	Steel	1842 x 975 x 760 mm	1700 mm	880 kg	94.3 m³	200	DIN 5	SS
China	Cylinder	40L	40L	Steel	229 mm	1500 mm	45 kg	5 m <sup>3</sup>	125	CGA724	SS
Taiwan	Cylinder	47L	47L	Aluminum	250 mm	 1350mm	38.7 kg	 5.5 kg	1450		

### Vapor pressure curve



#### Additional information

The information, recommendations, and data contained in this publication are intended to give basic guidance for safe handling and use of gases. For more information, please refer to Safety Data Sheets. You can locate these through the <u>Linde Safety Data Sheet Search</u>. It is essential for the safe use of gases that personnel are properly trained and are fully aware of the possible hazards. Further information and advice on any matter relating to the safe handling or use of these products may be obtained from the nearest Linde office.

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