

Nitiric oxide. NO. Nitrogen monoxide.

Product information

Nitric oxide annealing in marking SiON gate oxide and additive in dry plasma etch of silicon nitride.

Characteristics

Colorless gas with slight odor. Gas density is slightly heavier than air.

Physical data

Molecular weight	[g/mol]	30.006			
Boiling point	at 1.013 bar [° C]	-151.77	at 14.5 psi [° F]	-241.17	
Density	at 1.013 bar, 15° C [kg/m³]	1.27	at 1 atm., 70° F [lb/ft³]	0.078	
Vapor pressure	at 0° C [bar]	-	at 32° F [psi]	-	
	at 20° C [bar]	-	at 70° F [psi]	-	
Flammability range in air (% volume)		Non-combustible			

Product specification

Purity grade	Typical purity	Typical impurit			
		NO ₂	N ₂ O	H ₂ O	
2.5N	≥99.5 %	≤1,000	≤1,000	≤50	

Contact our team for higher grade or different specification products.

Shipping information

UN number	CAS number	EC number	DOT label	Hazard labels required		
1660	10102-43-9 233-271		Poison gas oxidizer corrosive	ADR Class 2, 1TOC DOT Class 2.3		

→ Nitiric oxide. Product datasheet.

Packaging information

US Grade 3.0N - VLSI

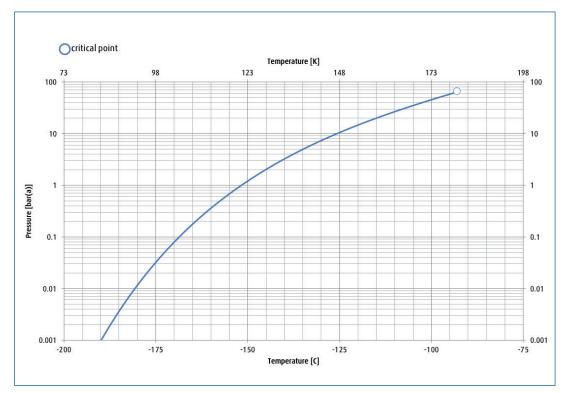
EU Grade 2.5N

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
Cylinder	200	44 L	Steel	9 in	52 in	130 lbs	56.0 cf	500	CGA660/728	SS
 Cylinder	50 L	50 L	Steel	237 mm	1,530 mm	63 kg	1.85 m ³	33	DIN8	SS
Cylinder	10 L	10 L	Steel	140 mm	880 mm	12 kg	0.35 m ³	33	DIN8	SS
Cylinder	2 L	2 L	Steel	104 mm	370 mm	6 kg	0.07 m ³	33	DIN8	SS
 Cylinder	40 L	40 L		250 mm	1,200 mm	36 kg	6 m ³	150	CGA660/QF-011	SS
Cylinder	10 L	10 L	Aluminum	140 mm	865 mm	12 kg	1.5 m ³	150	CGA660/QF-011	SS

Other valve and cylinder combinations available upon request Pure gas available. Contact Product Management for options.

Vapor pressure curve

China Grade 3.0N (Mixes with N₂)



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.

Please visit <u>www.linde.com/electronics</u> for Linde Electronics sales offices information.