

NITROUS OXIDE - (N₂O)

5.5

DESCRIPTION : A colorless, oxidizing, liquefied, high-pressure gas shipped at its vapor pressure of 51,4 Barg at 21° C.	APPLICATIONS : Oxygen source for Chemical Vapor Deposition (CVD) of silicon dioxide, SiO ₂ ; in conjunction with ammonia (which provides the nitrogen source), oxygen source in low temperature CVD of silicon oxynitride layers for MOS gates.	ADR Item No. : 2, 2 O
		ADR Label 2.2 Non flammable, non toxic gas Label 5.1 Oxidising substance
		MSDS REFERENCE : 093A
		CHEMICAL ABSTRACTS : 10024-97-2
		UN No. : 1070

PRODUCT		PRESSURE BARG	VALVE TYPE	VALVE OUTLET DIN 477 No	VALVE MATERIALS OF CONSTRUCTION
CYLINDER	CONTENTS				
50H	37 kg	51,4	Diaphragm	6/11	316L SS

PRODUCT CHARACTERISTICS	PRAXAIR SPECIFICATIONS	METHOD OF ANALYSIS (SEE KEY)
MINIMUM PURITY	99,9995 %	
Ammonia (NH ₃)	≤ 1 ppm	H
Carbon Dioxide (CO ₂)	≤ 0.5 ppm	J
Carbon Monoxide (CO)	≤ 0.5 ppm	J/A
Methane (CH ₄)	≤ 0.1 ppm	J/A
Nitric Oxide (NO)	≤ 0.1 ppm	H
Nitrogen (N ₂)	≤ 3 ppm	A
Nitrogen Dioxide (NO ₂)	≤ 0.1 ppm	H
Oxygen (O ₂)	≤ 1 ppm	A
Water (H ₂ O)	≤ 1 ppm	E

Sum total of all impurities not to exceed 20 ppm.

Notes :

- ◆ Cylinder sizes, contents, valve types and valve connections other than those indicated above are available on request.
- ◆ All expressions for concentration are for gas phase, by volume unless otherwise noted.
- ◆ MSDS Ref.: More detailed Safety Information can be obtained from the Material Safety Data Sheet No. 093A

Key to Analytical Techniques			
A	Gas Chromatograph with Thermal Conductivity Detector	D	Specific Oxygen Analyzer
B	Gas Chromatograph with Flame Ionization Detector	E	Specific Water Analyzer
C	Gas Chromatograph with Ultrasonic Detector	F	Total Hydrocarbon Analyzer
		G	Infrared
		H	Proprietary
		I	Gas Chromatograph with Helium Ionization Detector
		J	Flame Ionization with Methanizer
		K	Gas Chromatograph - Photo Ionization
		L	Gas Chromatograph - Flame Photometric
		M	Mass Spectrometry
		N	Wet Chemical
		O	Gas Chromatograph with Discharge Ionization Detector
		P	Gas Chromatograph with Methanizer Carbonizer
		Q	Gas Chromatograph with Electrolytic Conductivity
		R	Gas Chromatograph with Reduction Gas Analyzer
		S	Gaschromatograph with High Frequency Discharge Detector

IMPORTANT

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