

NITROUS OXIDE (N₂O)

Synonyms : Nitrogen oxide; Nitrogen monoxide



Gas Description

Nitrous Oxide is a colourless, non-toxic but narcotic, non-flammable but oxidizing, non-corrosive gas with a slightly sweetish odour and taste. It has a gas density at STP 1.872 kg/m³.

This product can be supplied in cylinders, or liquefied gas tank.

Typical applications :

Inhalation anesthetic and analgesic
Propellant for liquid foods, cosmetics, pharmaceuticals, household and industrial products
Leak detection and tracing
Oxidizer for atomic absorption analysis
booster for internal combustion motors

Transport Regulations :

UN Number : 1070
Shipping Name : NITROUS OXIDE
Class : 2.2 (5.1) Non-Flammable, non-toxic (oxidizers)
CAS Number : 10024-97-2
Hazchem : 2P

[Click here](#) for MSDS

[Click here](#) for more information

Physical Properties

Chemical symbol : N₂O
Molecular weight : 44.01
Specific gravity (Air=1) : 1.530
Specific volume (m³/kg) : 0.54
Critical temperature : 37°C
Boiling point : -85.5°C

Melting Point : -91°C
Critical pressure (bar) : 72.69
Major hazards : Combustion and Suffocation
Toxicity : None Established
Flammability Range : Oxidizer
Odour : Sweet

[Click here](#) for more information

Application

INDUSTRY

Pharmaceuticals

Food and Beverage

Electronics

Laboratories and Analysis

APPLICATION

Nitrous oxide is used as gas propellant for aerosols packaging.

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Can be the oxygen source for chemical vapor deposition of silicon oxynitride/silicon dioxide.

Nitrous oxide is a comburant for the flame in atomic absorption spectrophotometry.
N₂O is used in calibration gas mixtures.

[Click here](#) for more information

NITROUS OXIDE (N_2O)

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Nitrous Oxide : Instrument Grade

Min Purity 99.0%

| <u>Gas</u> | <u>Cylinder information</u> | | | |
|-----------------------------------|-----------------------------|------------------|----------------|----------------------------|
| Typical impurities (ppm molar) | Cylinder Size | Valve Connection | Pressure (kPa) | Contents (m ³) |
| | G | AS 2473 TYPE 30 | 5,100 | 16.6 |

Recommended Equipment

Single stage, chrome plated brass body regulator with a stainless steel diaphragm.

NOTE : Not for medical use.

For further information [Contact](#) the specialty gases representative in your region.