

Medical Nitrous Oxide

Consumer Medicine Information (CMI) summary

The [full CMI](#) on the next page has more details. If you are worried about using this medicine, speak to your doctor, dentist or other health professional.

1. Why am I using Medical Nitrous Oxide?

Medical nitrous oxide contains the active ingredient nitrous oxide. Medical nitrous oxide is used to relieve pain or to help you go to sleep during anesthesia.

For more information, see Section [1. Why am I using Medical Nitrous Oxide?](#) in the full CMI.

2. What should I know before I use Medical Nitrous Oxide?

Medical nitrous oxide is a liquefied medicinal gas, supplied in cylinders filled to a high pressure and only available with a prescription.

Do not use if you have ever had an allergic reaction to nitrous oxide or any of the ingredients listed at the end of the CMI.

Talk to your health professional if you have any other medical conditions, take any other medicines, or are pregnant or plan to become pregnant or are breastfeeding.

For more information, see Section [2. What should I know before I use Medical Nitrous Oxide?](#) in the full CMI.

3. What if I am taking other medicines?

Some medicines may interfere with medical nitrous oxide and affect how it works.

A list of these medicines is in Section [3. What if I am taking other medicines?](#) in the full CMI.

4. How do I use Medical Nitrous Oxide?

Medical nitrous oxide should only be used in a hospital or clinic under the supervision of your doctor, dentist or other healthcare professional.

More instructions can be found in Section [4. How do I use Medical Nitrous Oxide?](#) in the full CMI.

5. What should I know while using Medical Nitrous Oxide

Things you should do	<ul style="list-style-type: none">Take care when using medical nitrous oxide as it is a liquefied when stored under high pressure in gas cylinders. Contact with eyes or skin may result in cold burns.Use in a well-ventilated room. Gas scavenging systems are required.
Things you should not do	<ul style="list-style-type: none">Do not administer medical nitrous oxide without the supervision of a healthcare professional.Do not use medical nitrous oxide without oxygen in the gas mixture (min. 30%).Do not smoke, have a naked flame near or use oil-based products with your medical nitrous oxide gas cylinder or equipment.
Driving or using machines	<ul style="list-style-type: none">Always ask your health professional when it is safe for you to drive, operate machinery or perform activities following use of medical nitrous oxide.
Looking after your medicine	<ul style="list-style-type: none">Cylinders should be restrained upright in a secure, well-ventilated space below 65°C.Return the gas cylinder to BOC when you no longer need to use this medicine.

For more information, see Section [5. What should I know while using Medical Nitrous Oxide?](#) in the full CMI.

6. Are there any side effects?

- Common side effects are euphoria, dizziness, light headedness, nausea, vomiting, sense of intoxication, headache.
- Less common side effects are sleepiness, increased pressure in the middle ear, bloating, increased volume of gas in the intestines, effects on nerve function including sensations of numbness, tingling and weakness, usually in the legs, difficulty walking.

For more information, including what to do if you have any side effects, see Section [6. Are there any side effects?](#) in the full CMI.

WARNING: Nitrous oxide can make things catch fire very easily—even items that don't normally burn. Never smoke or go near flames when using nitrous oxide. Keep nitrous oxide away from oils, grease, or tar, as these can cause it to ignite suddenly.

Medical Nitrous Oxide

Active ingredient(s): *Nitrous Oxide*

Consumer Medicine Information (CMI)

This leaflet provides important information about using medical nitrous oxide. **You should also speak to your doctor, dentist or health professional if you would like further information or if you have any concerns or questions about using medical nitrous oxide.**

Where to find information in this leaflet:

- [1. Why am I using medical nitrous oxide?](#)
- [2. What should I know before I use medical nitrous oxide?](#)
- [3. What if I am taking other medicines?](#)
- [4. How do I use medical nitrous oxide?](#)
- [5. What should I know while using medical nitrous oxide?](#)
- [6. Are there any side effects?](#)
- [7. Product details](#)

1. Why am I using medical nitrous oxide?

Medical nitrous oxide contains the active ingredient nitrous oxide and is used to relieve pain or to help you go to sleep before and during surgery.

Medical nitrous oxide is a liquefied medicinal gas, supplied in cylinders filled to a high pressure.

Medical nitrous oxide is only available with a prescription and will only be given to you in a hospital or clinic under the supervision of a healthcare professional.

2. What should I know before I use medical nitrous oxide?

Warnings

Do not use Medical nitrous oxide if:

- You have an allergy to medical nitrous oxide or have had an allergic reaction in the past.
- You have a condition where air is entrapped within your body and it might expand when given medical nitrous oxide (e.g. bowel obstruction, blocked middle ear, air lodged in an artery). Ask your doctor for full details of these conditions.
- You have a collapsed lung.
- You have decompression sickness (the bends) or if you have been deep diving within the past 48 hours.

- You have lung disease or breathing difficulties such as emphysema or COPD.
- You have injuries to the face and jaw or head injuries or suspected or known increased pressure on the brain.
- You have a severely bloated stomach.
- You have been using medical nitrous oxide for a prolonged period without proper monitoring of your blood.
- You are intoxicated.

Check with your doctor if you:

- have had a reaction to medical nitrous oxide or any other general anaesthetic or pain relief medication in the past.
- have had any other health problems or medical conditions, including:
 - Low vitamin B12 levels
 - Problems with addiction to medicines
 - Bone marrow problems including various cells in the blood
 - Neurological diseases
- have had long term usage or been chronically exposed to medical nitrous oxide.
- have recently had eye or ear surgery where injections of gas have been used.
- take any medicines for any other condition.

During treatment, you may be at risk of developing certain side effects. It is important you understand these risks and how to monitor for them. See additional information under Section [6. Are there any side effects?](#)

Pregnancy and breastfeeding

Check with your doctor or dentist if you are.

- pregnant or intend to become pregnant.
- breastfeeding or intend to breastfeed.

They will advise you on the safe use of medical nitrous oxide.

Elderly People

- If you are older or have lung problems, you might need less medical nitrous oxide. The amount should be increased slowly.

Children and Babies

- Children and newborns, especially premature babies, require close monitoring if medical nitrous oxide is required.

Medical Gases Under Pressure

- NITROUS OXIDE STRONGLY SUPPORTS COMBUSTION AND INCREASES THE CHANCE OF FIRE.
- Do not use medical nitrous oxide without the necessary amount of oxygen as prescribed by your doctor or dentist. (min 30%).
- Care should be taken when using medical nitrous oxide as it is stored as a high pressure, liquefied gas in cylinders. This means that when the gas from the cylinder is released to atmosphere it can be extremely cold. Contact with eyes or skin may result in cold burns.
- As it is a liquefied gas, medical nitrous oxide must be stored upright.
- DO NOT use if the cylinder appears damaged or shows signs of tampering or it has degraded.
- DO NOT use if the tamper evident plastic seal has been removed on receipt from supplier.
- Always ensure a pressure regulator/flow controller is attached to a cylinder prior to use.
- NEVER use oil-based moisturising creams with your oxygen cylinder equipment e.g. Vaseline.
- If using alcohol gels allow plenty of time for the alcohol gel to dry before handling your cylinder equipment.
- There are safe working exposure levels for medical nitrous oxide and workplace gas scavenging system are required.
- Always refer to product labelling and safety data sheet on www.boc.com.au for storage and handling information.
- Please discuss these points with your health professional if you have any questions.

3. What if I am taking other medicines?

Tell your health professional if you are taking any other medicines, including any medicines, vitamins or supplements that you buy without a prescription from your pharmacy, supermarket or health food shop.

Some medicines may interfere with medical nitrous oxide and affect how it works.

- These include.
 - Pain relievers
 - Anaesthetics
 - Methotrexate
 - Medicines which may affect your nervous system

If you are taking methotrexate for treating arthritis or cancer with medical nitrous oxide, your blood cell count may be affected.

If you are taking medicines to treat anxiety or help you sleep such as diazepam the effect of medical nitrous oxide may be increased.

Check with your health professional if you are not sure about what medicines, vitamins or supplements you are taking and if these affect medical nitrous oxide.

4. How do I use Medical Nitrous Oxide?

How much to use

- Medical nitrous oxide should only be used under the supervision of your doctor, dentist or health professional. They will decide how long and how much (at least 30% with oxygen) you need depending on the amount of pain relief or sleep required.
- If you are elderly or have lung problems, you may need less medical nitrous oxide.
- Follow all directions given to you by your doctor, dentist or health professional carefully and ask for help if you do not understand.

When to use Medical Nitrous Oxide

- Medical nitrous oxide should be used as prescribed under the supervision of your health professional.

How to use Medical Nitrous Oxide

- Medical nitrous oxide is usually given to you.
 - with another anaesthetic gas and oxygen during surgery via a tube placed down your throat by an anaesthetist or.
 - with oxygen via a mask by your health professional.
- Your healthcare professional will ensure the equipment has been set up correctly and that you receive the right amount of medical nitrous oxide.

If you use too much Medical Nitrous Oxide

As medical nitrous oxide will be given to you in hospital or a clinic under the direction of a health professional it is very unlikely you will receive an overdose.

However, if this happened, quick action can be taken to maintain your breathing and replace the medical nitrous oxide with more oxygen.

Inappropriate or deliberate inhalation of medical nitrous oxide over prolonged periods will result in unconsciousness. You could be asphyxiated if medical nitrous oxide is inhaled in a confined or enclosed space for a long period as your body will not inhale enough oxygen.

If you think that you have used too much medical nitrous oxide you may need urgent medical attention.

You should immediately:

- Tell the person treating you; or
- go to the Emergency Department at your nearest hospital; or
- phone the Poisons Information Centre (by calling 13 11 26).

If you have any further questions on how this product is used, ask your healthcare professional.

5. What should I know while using Medical Nitrous Oxide?

Things you should do

Call your health professional straight away if you:

- Do not feel well while you are using medical nitrous oxide.

Be aware

- General anesthetics may cause a slight decrease in intellectual function and alertness for 2 to 3 days in some people.

Driving or using machines

- Although medical nitrous oxide is rapidly eliminated from the body, always ask your doctor or dentist when it is safe for you to drive, operate machinery or perform activities following its use.
- Following a general anaesthetic: do not drive or operate machinery for at least 24 hours after using medical nitrous oxide.

Looking after your medicine

- As medical nitrous oxide is stored as a liquefied gas, cylinders must be restrained upright in a secure, well-ventilated space below 65°C.
- Refer to product labelling and safety data sheet on www.boc.com.au.

Keep your medical nitrous oxide cylinder where young children cannot reach it.

When to discard your medicine

There is no shelf-life on the contained product therefore there is no expiry date listed on the product.

Gas cylinders are however subject to periodic inspection and testing at varying intervals depending on their specification as defined in Australian Standard AS 2030.5. Provided the cylinder has been subjected to normal conditions of use and has not been abused or treated in a way to render the cylinder unsafe, there is no general requirement for the user to return a cylinder before the gas contents have been used, even though the cylinder test interval may have lapsed.

All cylinders are the property of BOC and are returnable.

Getting rid of any unwanted medicine

If you no longer need to use this medicine, please return the cylinder to BOC.

6. Are there any side effects?

All medicines can have side effects. If you do experience any side effects, most of them are minor and temporary. However, some side effects may need medical attention.

See the information below and, if you need to, ask your health professional if you have any further questions.

Common side effects

Common side effects	What to do
Euphoria, dizziness, light headedness, nausea, vomiting sense of intoxication, headache.	Speak to your doctor or dentist if you have any of these less serious side effects and they worry you.

Less common side effects

Less common side effects	What to do
Sleepiness Increased pressure in the middle ear, bloating, increased volume of gas in the intestines. Effects on nerve function including sensations of numbness, tingling and weakness, usually in the legs, difficulty walking.	Call your doctor or dentist straight away or go straight to the Emergency Department at your nearest hospital if you notice any of these serious side effects.

Other side effects (frequency unknown)

Other side effects (frequency unknown)	What to do
Interference with the way your body uses Vitamin B12 which may affect your blood cell count. Psychosis, confusion, anxiety, addiction. Difficulty with breathing.	Call your doctor or dentist straight away or go straight to the Emergency Department at your nearest hospital if you notice any of these serious side effects.

Tell your doctor, dentist or health professional if you notice anything else that may be making you feel unwell.

Other side effects not listed here may occur in some people.

Reporting side effects

After you have received medical advice for any side effects you experience, you can report side effects to the Therapeutic Goods Administration online at www.tga.gov.au/reporting-problems. By reporting side effects, you can help provide more information on the safety of this medicine.

7. Product details

This medicine is only available with a prescription.

What Medical Nitrous Oxide contains

Active ingredient (main ingredient)	Nitrous Oxide 99% v/v min
Other	Carbon dioxide - 300ppm v/v max Carbon monoxide - 5ppm v/v max Oxides of nitrogen - 2ppm v/v max Water (vapour)- 67ppm v/v max

Do not take this medicine if you are allergic to any of these ingredients.

What Medical Nitrous Oxide looks like

Medical nitrous oxide is a clear, colourless, slightly sweet smelling, non-irritating gas supplied in white cylinders with a blue (ultramarine) cylinder shoulder as determined by Australian Standard: *AS:4484 Gas cylinders for industrial, scientific, medical and refrigerant use - Labelling and colour coding*.

Medical gas cylinders are supplied with product specific pin-indexed valves as per Australian Standard: AS: 2473.3 Valves for compressed gas cylinders Part 3: Outlet connections for medical gases (including pin-indexed yoke connections).

The contents of a gas cylinder are identified primarily by the labelling on the cylinder. Labels on a gas cylinder should always be consulted prior to use.

Medical Nitrous Oxide is registered as:

Aust R 34466

BOC GASES NITROUS OXIDE 99.0%v/v MEDICAL E.P.

GRADE Gas Medicinal

Who distributes Medical Nitrous Oxide

BOC Ltd

10 Julius Ave

North Ryde NSW 2113

This leaflet was prepared in November 2025