

# Medical Nitrous Oxide

## Medicinal gas, liquefied

### Package Leaflet: Information for the User

**Medical Nitrous Oxide**  
**Nitrous Oxide 98%**  
**Medicinal gas, liquefied**

**Read all of this leaflet carefully before you start using this medicine.**

- Keep this leaflet as you may need to read it again.
- If you have further questions, ask your healthcare professional (doctor, nurse or pharmacist).
- This medicine has been prescribed for you.
- Do not pass it on to others as it may harm them, even if their symptoms are the same as yours.
- If any of the side effects become serious, or if you notice any side effects not listed in this leaflet, please tell your healthcare professional immediately.

**This leaflet gives you information about:**

1. What is Nitrous Oxide and what is it used for
2. Things to consider before use
3. How to use Nitrous Oxide
4. Possible side effects
5. How to store Nitrous Oxide cylinders
6. Further Information

#### 1. WHAT IS NITROUS OXIDE AND WHAT IS IT USED FOR

Medical Nitrous Oxide is a liquefied medicinal gas, supplied in cylinders filled to a high pressure.

Medical Nitrous Oxide is used for:

- anaesthesia
- pain relief
- inflating the abdominal cavities during a laparoscopy (an investigative operation)
- as a refrigerant in cryosurgery (a treatment using extreme cold to remove warts/verrucae).

#### 2. THINGS TO CONSIDER BEFORE USE

Medical Nitrous Oxide is only given to you in a hospital or clinic under the supervision of a healthcare professional. Ensure that your healthcare professional is aware of any medical conditions that you may have.

**Do not use Nitrous Oxide if you have:**

- air trapped in a part of the body where its expansion may be dangerous, such as air lodged in an artery
- a collapsed lung
- decompression sickness (the bends) or if you have been deep diving within 48 hours
- lung disease or breathing difficulties such as emphysema
- injuries to the face and jaw
- head injuries
- a severely bloated stomach
- recently consumed alcohol
- suspected or known increased pressure on the brain.

Tell your healthcare professional if you have recently had any surgery on your eyes or ears where injections of gas have been used.

#### Take special care with Nitrous Oxide

If you need to use Nitrous Oxide for more than 24 hours at a time or more frequently than once every 4 days, your healthcare professional will take routine blood tests to ensure the Nitrous Oxide has not affected your blood cell count or the way your body uses Vitamin B<sub>12</sub>.

Tell your healthcare professional if you know you have Vitamin B<sub>12</sub> Deficiency.

#### Taking other medicines

Please tell your healthcare professional if:

- you are taking Methotrexate for treating arthritis or cancer. Taking Nitrous Oxide with Methotrexate may have an effect on your blood cell count
- you are taking medicines to treat anxiety or help you sleep such as diazepam or lorazepam. These drugs may increase the effect of Nitrous Oxide.

Tell your healthcare professional, if you are taking or have recently taken any other medicines, including medicines obtained without a prescription.

## Pregnancy and breast feeding

Nitrous Oxide may be used if you are pregnant or breast feeding.

Ensure that you tell your healthcare professional that you are pregnant before taking Nitrous Oxide as they will advise you on the safe use of Nitrous Oxide.

## Driving and using machines

If you have been given Nitrous Oxide, you must wait at least 12 hours after use, before driving or using any machines.

Ensure that your healthcare professional advises you whether it is safe for you to drive.

## 3. HOW TO USE NITROUS OXIDE

### Instructions for use

Your healthcare professional will ensure that your Nitrous Oxide supply is suitable for your use and that the equipment has been set up correctly so that you receive the right amount of Nitrous Oxide.

When you are given your Medical Nitrous Oxide it will be supplied via a facemask or an endotracheal tube (a tube inserted into your airways).

### If you use more Nitrous Oxide than you should

Inappropriate or deliberate inhalation of Nitrous Oxide over prolonged periods will result in unconsciousness. If inhaled in a confined or enclosed space for a prolonged period, death from low blood oxygen could occur.

In the event of an overdose your healthcare professional will stop administration and continue the appropriate care.

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

## 4. POSSIBLE SIDE EFFECTS

Like all medicines, Nitrous Oxide may cause side effects, although not everybody will get them.

Common side effects that may occur if you use Nitrous Oxide are:

- dizziness
- light-headedness
- sickness
- tingling
- disorientation.

Less common side effects that may occur if you use Nitrous Oxide are:

- problems with the ear due to increased pressure inside the ear
- tiredness
- bowel enlargement due to trapped gas.

Rare side effects that may occur if you use Nitrous Oxide are:

- interference with the way your body uses Vitamin B<sub>12</sub>, which may affect your blood cell count
- effects on nerve function including sensations of numbness and weakness
- difficulty with breathing
- addiction.

### Reporting of side effects

If you experience any of these side effects, or if you notice any side effects not listed in this

leaflet, contact your healthcare professional immediately.

You can also report side effects directly via

HPRA Pharmacovigilance

Earlsfort Terrace,

IRL - Dublin 2;

Tel: +353 1 6764971;

Fax: +353 1 6762517.

Website: [www.hpra.ie](http://www.hpra.ie); e-mail: [medsafety@hpra.ie](mailto:medsafety@hpra.ie).

By reporting side effects, you can help provide more information on the safety of this medicine.

## 5. HOW TO STORE NITROUS OXIDE CYLINDERS

### Expiry date

Nitrous Oxide should not be used after the expiry date stated on the batch label on the cylinder.

Nitrous Oxide cylinders should be used in strict rotation so that cylinders with the earliest filling date are used first.

## Cylinder storage

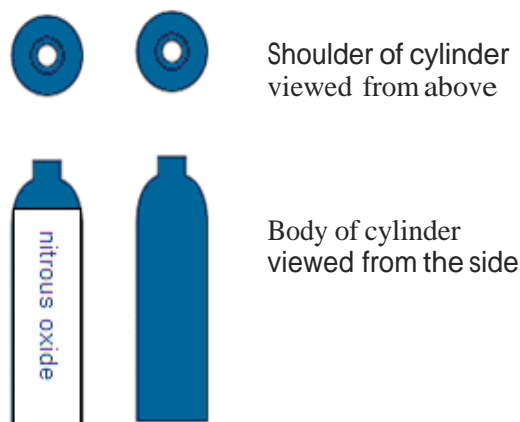
Cylinders should be securely stored, in a well ventilated, dry and clean area, away from oils, greases, flammable materials and sources of extreme temperature.

The healthcare professional in the hospital or clinic will be responsible for making sure the cylinders are stored correctly.

**DO NOT SMOKE** or have a naked flame near your Nitrous Oxide gas cylinder. The gas will make a flame burn much more violently.

**NEVER** use oil based moisturising creams with your cylinder equipment. If using alcohol gels allow plenty of time for the alcohol gel to dry before handling your cylinder equipment.

The colour coding of the shoulder of Medical Nitrous Oxide cylinders is blue. The body is colour coded white. For a limited period cylinders may have a blue body



## 6. FURTHER INFORMATION

### What Nitrous Oxide Contains

Your Nitrous Oxide cylinder contains a minimum of 98% Nitrous Oxide.

There are no other ingredients.

### Nitrous Oxide cylinders

Medical Nitrous Oxide is supplied in the following size cylinders:

Cylinder Size	Cylinder Contents (Litres)	Cylinder Size	Cylinder Contents (Litres)
AZ	450	F	3600
D	900	G	9000
E	1800	J	18000

All cylinders require a separate pressure regulator to be fitted to the cylinder valve before use.

### Marketing Authorisation Holder and Manufacturer

#### Marketing Authorisation Holder:

BOC Gases Ireland Limited  
J F Kennedy Drive  
Bluebell  
Dublin 12  
Tel 1800 370700  
healthcareinfo.ie@boc.com

#### Manufacturer:

BOC Limited  
Priestley Road  
Worsley  
Manchester  
M28 4UT  
United Kingdom

**This leaflet was last approved in**  
07/2015