

# Nitrogen



## SAFETY DATA SHEET

Issued: 30/11/2010 | Version 0

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Nitrogen
Chemical Formula	N <sub>2</sub>
Recommended Use	General Industrial
Company Name	Irish Oxygen Co Ltd, Waterfall Road, Cork
Email	sds@irishoxygen.com
Emergency Phone	021-4541821 (office hours only)

### 2. HAZARDS IDENTIFICATION

Compressed gas  
In high concentrations, may cause asphyxiation  
Not classified as a dangerous substance

#### GHS Hazard Pictograms



### 3. COMPOSITION INFORMATION

Substance/Preparation	Substance
Composition	No other components
CAS No	07727-37-9
EINECS No	231-783-9

### 4. FIRST AID MEASURES

#### Inhalation

In high concentrations, may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

#### Ingestion

Not considered a potential route of exposure

#### Skin contact

Not considered a potential route of exposure

#### Eye contact

Not considered a potential route of exposure

### 5. FIRE FIGHTING MEASURES

#### Specific hazard

Exposure to fire may cause containers to rupture or explode

#### Hazardous combustion products

None

#### Suitable extinguishing media

All known extinguishers can be used.

#### Specific methods

In confined space use self contained breathing apparatus any other fire.

Move away from container and cool with water from a protected position.

#### Special protective equipment for fire fighters

In confined space use self contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Evacuate area. Ensure adequate air ventilation. Wear self contained breathing apparatus when entering area unless atmosphere is proved to be safe

#### Environmental precautions

Try to stop release. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous

#### Clean up methods

Ventilate area.

### 7. HANDLING AND STORAGE

Close cylinder valve when not in use to prevent contamination of cylinder. Open valve slowly to avoid pressure shock. Purge air from system before introducing gas. Do not allow back feed into cylinder. Use only properly specified equipment that is suitable for Nitrogen, its supply pressure and temperature. Keep cylinder below 50°C in a well ventilated place.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ensure adequate ventilation.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Colour /Odour	Colourless odourless gas
Molecular Weight	28
Melting Point	-210°C
Boiling Point	-196°C
Critical Temperature	-147°C
Relative Density - Gas	0.97 (Air=1)
Relative Density - Liquid	Not applicable
Vapour Pressure 20°C	Not applicable

<b>Solubility mg/l water</b>	20 mg/l
<b>Other Data</b>	No odour warning properties. Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

### 10. STABILITY AND REACTIVITY

Stable under normal conditions.

### 11. TOXICOLOGICAL INFORMATION

No toxicological effects from this product.

### 12. ECOLOGICAL INFORMATION

No ecological damage caused by this product.

### 13. DISPOSAL CONSIDERATIONS

To atmosphere in a well ventilated place.  
Do not discharge into any place where its accumulation could be dangerous

### 14. TRANSPORT INFORMATION

<b>UN Number:</b>	1066
<b>Class/Div:</b>	2.2
<b>ADR/RID Classification code:</b>	1A
<b>ADR/RID Hazard Number:</b>	20
<b>Labelling ADR:</b>	Non flammable non toxic gas

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident

or emergency. Before transporting product cylinders, ensure that they are firmly secured, that cylinder valve is closed and not leaking, that there is adequate ventilation and that applicable regulations are complied with.

### 15. REGULATORY INFORMATION

<b>Number in Annex 1 of Dir 67/548</b>	Not included in Annex 1
<b>EC Classification</b>	Not classified as dangerous substance
<b>Risk Phrases</b>	O Non flammable Ras Asphyxiant in high concentrations
<b>Safety Phrases</b>	S9 Keep cylinder in a well ventilated place S23 Do not breathe the gas

### 16. OTHER INFORMATION

The information given here is based on the present state of knowledge and describes the product under the aspects of safety. It should not therefore be construed as guaranteeing specific properties. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

### CYLINDER DETAILS

Cylinder Type	Nominal Capacity M <sup>3</sup>	Pressure at 15°C	Approx Dimensions (mm)	Approx gross Cylinder weight (Kg)
11	10.7	200 bar	1620 x Ø230	90
6	6.5	140 bar	1410 x Ø240	70
MW	1.25	140 bar	700 x Ø175	12
MCP	150	140 bar	1250x930x1840	1200

**Outlet Connection:** BS341 No 3: Right hand 5/8" BSP female cone recessed.