

Oxygen



SAFETY DATA SHEET

Issued: 30/11/2010 | Version 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Oxygen
Chemical Formula	O ₂
Recommended Use	Welding
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
Oxidant. Strongly supports combustion. May react violently with combustible materials

GHS Hazard Pictograms



3. COMPOSITION INFORMATION

Substance/Preparation	Substance
Composition	No other components
CAS No	07782-44-7
EINECS No	231-956-9

4. FIRST AID MEASURES

Inhalation

Not hazardous

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

Supports combustion
Non flammable
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

If possible stop flow of product.
Move away from container and cool with water from a protected position

Special protective equipment for fire fighters

None

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Evacuate area. Ensure adequate air ventilation.
Eliminate ignition sources.

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

Use no oil or grease. Open valve slowly to avoid pressure shock. Segregate from other flammable gases and other flammable materials. Suck back of water into the cylinder must be prevented. Do not allow back feed into cylinder. Use only properly specified equipment that is suitable for Oxygen, its supply pressure and temperature. Keep away from ignition sources (including static discharges). Keep cylinder below 50°C in a well ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Do not smoke while handling product. Wear suitable hand, body and head protection. Wear goggles, with suitable filter lenses when used for welding/cutting. Avoid oxygen rich (>21%) atmospheres. Ensure adequate ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Colour /Odour	Colourless odourless gas
Molecular Weight	32
Melting Point	-219°C
Boiling Point	-183°C
Critical Temperature	-118°C
Relative Density - Gas	1.1 (Air=1)
Relative Density - Liquid	Not applicable
Vapour Pressure 20°C	Not applicable
Solubility mg/l	39 mg/l

water

Other Data

No odour warning properties.
Gas/vapour heavier than air.
May accumulate in confined spaces, particularly at or below ground level.

10. STABILITY AND REACTIVITY

May react violently with combustible materials.
May react violently with reducing agents.
Violently oxidises organic material.

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

UN Number: 1072
Class/Div: 2.2
Subsidiary risk: 5.1
ADR/RID Classification code: 10
ADR/RID Hazard Number: 25
Labelling ADR: Non flammable non toxic gas. Fire intensifying risk.

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

Number in Annex 1 of Dir 67/548	008-001-00-8
EC Classification	O, R8
Risk Phrases	O Non flammable R8 Strongly supports combustion
Safety Phrases	S9 Keep cylinder in a well ventilated place S17 Keep cylinder away from combustible material, use no oil or grease

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 ³	Pressure at 15°C	Approx Dimensions (mm)	Approx gross Cylinder weight (Kg)
7	7.0	140 bar	1410 x Ø240	70
MW	1.5	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.