

**1/ IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY**

MSDS Nr :	097A
Product name :	OXYGEN
Chemical formula :	O ₂
Company identification	see heading and/or footer
Emergency phone numbers	see heading and/or footer

2/ COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Preparation	Oxygen
Components/Impurities	Contains no other components or impurities which will influence the classification of the product.
CAS Nr	07782-44-7
EEC Nr (from EINECS)	2319569

3/ HAZARDS IDENTIFICATION

Hazards identification	Compressed gas Oxidant. Strongly supports combustion. May react violently with combustible materials.
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4/ FIRST AID MEASURES

Inhalation	Continuous inhalation of concentrations higher than 75% may cause nausea, dizziness, respiratory difficulty and convulsion.
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5/ FIRE FIGHTING MEASURES

Specific hazards	Supports combustion. Exposure to fire may cause containers to rupture/explode. Non flammable.
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Hazardous combustion products	None
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Suitable extinguishing media	All known extinguishants can be used.
Specific methods	If possible, stop flow of product. Move container away or cool with water from a protected position.
Special protective equipment for fire fighters :	None.

6/ ACCIDENTAL RELEASE MEASURES

Personal precaution	Evacuate area. Ensure adequate air ventilation. Eliminate ignition sources.
Environmental precaution	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


Handling and storage	Use no oil or grease. Open valve slowly to avoid pressure shock. Segregate from flammable gases and other flammable materials in store. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Keep away from ignition sources (including static discharges). Refer to supplier's container handling instructions. Keep container below 50°C in a well ventilated place.
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8/ EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection	Do not smoke while handling product. Wear suitable hand, body and head protection. Wear goggles with suitable filter lenses when use is cutting/welding. Avoid oxygen rich (>21%) atmospheres. Ensure adequate ventilation.
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9/ PHYSICAL AND CHEMICAL PROPERTIES

Molecular weight	32
Meeting point	-219°C

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Boiling point	-183°C
Critical temperature	-118°C
Relative density, gas (air=1)	1.1
Relative density, liquid (eau =1)	1.1
Vapour Pressure à 20°C	Not applicable.
Solubility mg/l water	39 mg/l
Appearance/Colour	Colourless gas.
Odour	No odour warning properties.
Auto ignition temperature	Not applicable.
Flammability range	Oxidiser.
Other data	Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

10 / STABILITE ET REACTIVITE

Stability and reactivity :	May react violently with combustible materials. May react violently with reducing agents. Violently oxidises organic material.
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11 / TOXICOLOGICAL INFORMATION

General	No toxicological effects from this product.
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12 / ECOLOGICAL INFORMATION

General	No ecological damage caused by this product.
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13 / DISPOSAL CONSIDERATIONS

General	To atmosphere in a well ventilated place. Do not discharge into any place where its accumulation could be dangerous. Contact supplier if guidance is required.
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14 / TRANSPORT INFORMATION

UN Nr	1072
Class/Div	2.2

Subsidiary risk	5.1
ADR/RID Item Nr	2.1a
ADR/RID Hazard Nr	25
Tremcard Nr	842
Labelling ADR	Label 2 : non flammable non toxic gas. Label 05 : fire intensifying risk.
Other transport information	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 an emergency. Before transporting product containers ensure that they are firmly secured and : <ul style="list-style-type: none">- cylinder valve is closed and not leaking- valve outlet cap nut or plug (where provided) is correctly fitted- valve protection device (where provided) is correctly fitted- adequate ventilation- compliance with applicable regulations.

15/ REGULATORY INFORMATION

Number in Annex I of Dir 67/548	Not included in Annex I.
EC Classification	Proposed by the industry. 0 ; R8A
- Symbols	O
- R Phrases	8A
- S Phrases	9,17A
Labelling of cylinders	
- Symbols	Road transport symbols are used and selected according to the most stringent product classification – EC or ADR. Label 2 : non flammable non toxic gas. Label 05 : fire intensifying risk.
- Risk phrases	R8A Strongly supports combustion.
- Safety phrases	S9 Keep container in well ventilated place. S17A Keep away from combustible material, use no oil or grease.

 The logo for Prodont Holliger, featuring a stylized 'PH' in blue and black, followed by the text 'Prodont Holliger' in a blue sans-serif font.	SAFETY DATA SHEET OXYGEN N° MSDS 097A	Version 03 06/2015
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16/ OTHER INFORMATION

Ensure all national/local regulations are observed.

Ensure operators understand the hazard of oxygen enrichment.

Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

Details given in this document are believed to be correct at the time of going to press. 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.

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