

SAFETY DATA SHEET

1 Identification of the substance or preparation and of the company/undertaking

1.1 Product identifier

Product Name: OXYGEN
Datasheet Number: O2-r 1. 0. 0
Head Office:: Wilhelmsen Ships Service AS
Address: Strandveien 20, N1324 Lysaker, Norway, Tel:(+47) 67 58 45 50

1.2 Relevant identified uses of the substance or mixture and uses advised against

Gas for welding and cutting

1.3 Details of the supplier of the safety data sheet

Name of Supplier: Wilhelmsen Ships Service AS
Address of Supplier: Willem Barentszstraat 50
3165AB Rotterdam
The Netherlands
Telephone: +31 10 4877 777
Fax: +31 10 4877 888
Responsible Person: Patrick Rijdsdijk, Product HSE Manager, Tel.:+31 6 349 440 35
Email: patrick.rijdsdijk@wilhelmsen.com

1.4 Emergency telephone number

-ONLY TO BE USED IN CASE OF AN INCIDENT-
NCEC: +44 1865 407333, CHEMTREC (800) 424 9300
American Chemistry Council +1 703 527 3887,
Greece +30 210 7793777
Australia: +61 3 9630 0998
Giftinformasjonssentralen in Norway Tel.: +47 22591300

2 Hazards identification

2.1 Classification of the substance or mixture

- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Press. Gas
- Ox. Gas 1
- May cause or intensify fire; oxidizer.

2.2 Label elements



- Signal Word: Danger
- Symbols: GHS03, GHS04

Hazard phrases

- May cause or intensify fire; oxidizer.

OXYGEN

2 Hazards identification (....)

- Contains gas under pressure; may explode if heated.

Precautionary Phrases

- Keep/Store away from clothing/.../combustible materials.
- Protect from sunlight. Store in a well-ventilated place.
- In case of fire: Stop leak if safe to do so.
- Keep reduction valves free from grease and oil.
- Do not breathe dust/fume/gas/mist/vapours/spray.

Risk Phrases

- Contact with combustible material may cause fire (R8)

Safety Phrases

- Keep away from combustible material (S17)

2.3 Other hazards

- Odour: Odourless
- Appearance: Compressed gas
- Contact with eyes: May cause irritation, Looking into the welding / brazing flame with incorrect or insufficient eye protection may cause arc-eye.
- Contact with skin: May cause irritation
- Inhalation: Inhalation of fumes formed during welding and or cutting may be harmful.

3 Composition/information on ingredients

3.1 Mixtures

Chemical Name	Concentration	CAS Number	EC Number	R/H Phrases*	Symbols
Oxygen	>99 %	7782-44-7	231-956-9	R8	O
CLP CLASSIFICATION: Press Gas. Ox Gas 1				H270	GHS03, GHS04

*See Section 16

4 First aid measures

4.1 Description of first aid measures

- IF ON SKIN: Wash with plenty of soap and water.
- Contaminated clothing should be laundered before reuse
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- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- When in doubt or symptoms persist, seek medical attention
-
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
- Rescuers should take suitable precautions to avoid becoming casualties themselves
-

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4 First aid measures (....)

4.2 Most important symptoms and effects, both acute and delayed

- Inhalation of fumes formed during welding and or cutting may be harmful.

4.3 Indication of immediate medical attention and special treatment needed

5 Fire-fighting measures

5.1 Extinguishing media

- Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions

5.2 Special hazards arising from the substance or mixture

- Inform Fire Brigade of potential danger of exploding and rocketing cylinders
- Pressurized container
- Oxidising

5.3 Advice for firefighters

- Keep container(s) exposed to fire cool, by spraying with water
 - Inform Fire Brigade of potential danger of exploding and rocketing cylinders
 - Fight fire remotely due to the risk of explosion.
-

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Shut off source of leak if safe to do so
- Do not smoke
- Avoid contact with combustible material

6.2 Environmental Precautions

- No special precautions are required for this product

6.3 Methods and material for containment and cleaning up

- Shut off source of leak if safe to do so
- Ventilate area

6.4 Reference to other sections

- None
-

7 Handling and storage

7.1 Precautions for safe handling

- Use proper hoisting equipment
- Use only outdoors or in a well-ventilated area.

7.2 Conditions for safe storage, including any incompatibilities

- Keep in a cool, dry, well ventilated place
- Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 deg C

7.3 Specific end use(s)

8 Exposure controls/personal protection

8.1 Control parameters

- Oxygen
TLV (TWA) 5 mg/m³ (Welding fumes)

8.2 Exposure controls

- No special requirements

Occupational exposure controls

- In poorly ventilated areas or confined spaces, use an airline respirator or self-contained breathing apparatus
- Avoid oxygen enrichment in confined spaces or in poorly ventilated areas.
- Wear safety boots when handling cylinders.
- Wear suitable filter lenses when welding / cutting.
- Wear leather gloves, boots and apron



Boots



Gloves



Visor



No Smoking

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Odour: Odourless
- Appearance: Compressed gas
- pH - not applicable
- Boiling point - 183 °C at 760 mm /Hg
- Vapour pressure - not applicable
- Vapour density (air = 1) 1.1
- Melting point - 218 °C at 760 mm /Hg
- Water solubility 0.04 g/l
- Not flammable but will support combustion
- Strong oxidising agent, Contact with other material may cause fire

9.2 Other information

10 Stability and reactivity

10.1 Reactivity

- This article is considered stable under normal conditions

10.2 Chemical stability

- This article is considered stable under normal conditions

10.3 Possibility of hazardous reactions

- Reacts violently with combustible material
- Reacts violently with reducing agents

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10 Stability and reactivity (....)

10.4 Conditions to avoid

- Avoid contact with combustible material

10.5 Incompatible materials

- Incompatible with combustible material

10.6 Hazardous Decomposition Products

- No hazardous decomposition products known
-

11 Toxicological information

11.1 Information on toxicological effects

- Non-toxic

Inhalation

- Inhalation of fumes formed during welding and or cutting may be harmful.

Contact with skin

- May cause irritation

Contact with eyes

- May cause irritation

Ingestion

- Not regarded as a potential route of exposure.

Carcinogenicity

- No evidence of carcinogenic effects
-

12 Ecological information

12.1 Toxicity

- On available data, substance is not harmful to aquatic life

12.2 Persistence and degradability

- Not applicable

12.3 Bioaccumulation Potential

- Not applicable

12.4 Mobility in soil

- This substance is volatile

12.5 Results of PBT and vPvB assessment

12.6 Other Adverse Effects

- Presents no hazard to the environment
-

13 Disposal considerations

13.1 Waste treatment methods

- Contact supplier for further information
-

14 Transport information

Non-Flammable Compressed Gas



Oxidizing Agent

14.1 UN Number

- UN1072

14.2 UN Proper Shipping Name

- Oxygen, Compressed

14.3 Transport hazard class(es)

- 2.2 (5.1)

14.4 Packing group

- n/a

14.5 Environmental hazards

- On available data, substance is not harmful to the environment

14.6 Special precautions for user

- Gas cylinders must be equipped with valve protection caps during transport.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

- Not applicable

Other information**Road/Rail (ADR/RID)**

Proper Shipping Name:	Oxygen, Compressed		
ADR UN No.:	UN1072	ADR Hazard Class:	2.2
ADR Packing Group:	n/a	ADR subrisk:	5.1
ADR Flashpoint:	n/a		

Sea (IMDG)

Proper Shipping Name:	Oxygen, Compressed		
IMDG UN No.:	UN1072	IMDG Hazard Class.:	2.2
IMDG Pack Group.:	n/a	IMDG EmS:	F-C, S-W
IMDG subrisk:	5.1	IMDG Flashpoint:	n/a

Air (ICAO/IATA)

Proper Shipping Name:	Oxygen, Compressed		
ICAO Un No.:	UN1072	ICAO Hazard Class.:	2.2
ICAO Packing Group.:	n/a	ICAO subrisk:	5.1
ICAO Flashpoint:	n/a		

DOT / CFR (US Department of Transportation)

DOT Proper Shipping Name:	Oxygen, Compressed		
Hazardous Material:	Oxygen		
Hazard Class:	2.2	Identification Number:	UN1072
Product RQ (lbs):	n/a	DOT subrisk:	5.1
DOT Flashpoint:	n/a		

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- This Safety Data Sheet has been prepared in accordance with article 31 and annex II in REACH and Directive 453/2010/EU.

15.2 Chemical Safety Assessment

NONE

16 Other information

Text of R and S phrase codes used in this safety data sheet:- H270: May cause or intensify fire; oxidizer.; R8: Contact with combustible material may cause fire.

The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents

The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties

The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer

The most up-to-date version of this MSDS can be found on WWW.WILHELMSSEN.COM

OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES

For addresses of other Wilhelmsen Ships Service offices, please refer to www.wilhelmsen.com/shipsservice

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16 Other information (....)

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