

Material Safety Data Sheet

Printing date 08/14/2006

Version 2

Reviewed on 08/14/2006

1 Identification of substance

· **Product details**

· **Trade name: Oxygen**

· **Article number:** 026-01-0006BOC

· **Creation date:** 08/08/2006

· **Manufacturer/Supplier:**

BOC Canada Limited
5860 Chedworth Way
Mississauga, Ontario L5R 0A2
www.bocgases.ca

TELEPHONE NUMBER: (905) 501-1700

24-HOUR EMERGENCY TELEPHONE NUMBER: (905) 501-0802

EMERGENCY RESPONSE PLAN NO: 2-0101

Please ensure that this MSDS is received by the appropriate person

· **Information department:** Customer Service Centre: 1-866-385-5349

2 Composition/Data on components

· **Chemical characterization:**

· **CAS No. Description**

7782-44-7 Oxygen

· **Identification number(s)**

· **EINECS Number:** 231-956-9

· **EU Number:** 008-001-00-8

3 Hazards identification

· **Hazard description:**

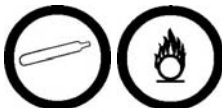


Oxidizing

· **WHMIS-symbols:**

A - Compressed gas

C - Oxidizing materials



· **HMIS-ratings (scale 0 - 4)**

HEALTH 0 Health = 0

FIRE 3 Fire = 3

REACTIVITY 0 Reactivity = 0

(Contd. on page 2)

CDN

Material Safety Data Sheet

Printing date 08/14/2006

Version 2

Reviewed on 08/14/2006

Trade name: Oxygen

(Contd. of page 1)

· **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 3
Reactivity = 0

· **Information pertaining to particular dangers for man and environment:**

Contact with combustible material may cause fire.

· **Classification system:**

The classification is in line with internationally approved calculation standards. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

* 4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Not applicable

* 5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Wear self-contained respiratory protective device.

* 6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
- **Measures for environmental protection:** Prevent seepage into sewage system, workpits and/or cellars.
- **Measures for cleaning/collecting:** Ensure adequate ventilation.

* 7 Handling and storage

- **Handling:**
- **Information for safe handling:** Cylinder should be restrained when not in use.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Do not expose cylinder to temperatures higher than 50°C (122 °F)
- **Information about storage in one common storage facility:** Store away from flammable substances.

(Contd. on page 3)

Material Safety Data Sheet

Printing date 08/14/2006

Version 2

Reviewed on 08/14/2006

Trade name: Oxygen

(Contd. of page 2)

- **Further information about storage conditions:**
Store cylinder in a well ventilated area.
Store in accordance with local fire code and/or building code or any pertaining regulations.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** Adequate local ventilation.
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Breathing equipment:**
Use atmosphere-supplying respirators (e.g. supplied-air: demand, pressure-demand, or continuous-flow or self-contained breathing apparatus: demand or pressure-demand or combination supplied-air with auxiliary self-contained air supply atmosphere-supplying respirator) in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves.

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Eye protection:** Safety glasses

9 Physical and chemical properties

· **General Information**

Form:	Gaseous.
Color:	Colorless
Odor:	Odorless

· **Change in condition**

Melting point/Melting range:	-219°C
Boiling point/Boiling range:	-182°C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Contact with combustible material may cause fire.

· **Danger of explosion:** Explosive when mixed with combustible material.

· **Solubility in / Miscibility with**
Water at 20°C: 39 g/l

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

(Contd. on page 4)

Material Safety Data Sheet

Printing date 08/14/2006

Version 2

Reviewed on 08/14/2006

Trade name: Oxygen

(Contd. of page 3)

- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **General notes:** Generally not hazardous for water

13 Disposal considerations

- **Product:**
- **Recommendation:**
Cylinder and unused product should be returned to vendor. Disposable cylinder must be disposed of in accordance with local regulations.
- **Uncleaned packagings:**
- **Recommendation:**
Cylinder and unused product should be returned to vendor. Disposable cylinder must be disposed of in accordance with local regulations.
- **Recommended cleansing agent:** None applicable.

14 Transport information

- **TDG and DOT regulations:**



- **Hazard class:** 2.2
- **Identification number:** UN1072
- **Packing group:** -
- **Proper shipping name (technical name):** OXYGEN, COMPRESSED
- **Label:** 2.2+5.1
- **Packaging group:** -

(Contd. on page 5)

Material Safety Data Sheet

Printing date 08/14/2006

Version 2

Reviewed on 08/14/2006

Trade name: Oxygen

(Contd. of page 4)

· Maritime transport IMDG:



- **IMDG Class:** 2.2
- **UN Number:** 1072
- **Label:** 2.2+5.1
- **Packaging group:** -
- **EMS Number:** F-C,S-W
- **Marine pollutant:** No
- **Propper shipping name:** OXYGEN, COMPRESSED

· Air transport ICAO-TI and IATA-DGR:



- **ICAO/IATA Class:** 2.2
- **UN/ID Number:** 1072
- **Label:** 2.2+5.1
- **Packaging group:** -
- **Propper shipping name:** OXYGEN, COMPRESSED

15 Regulations

· Sara

· Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

· Proposition 65

· Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

(Contd. on page 6)

Material Safety Data Sheet

Printing date 08/14/2006

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Trade name: Oxygen

(Contd. of page 5)

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

· Canadian substance listings:**· Canadian Domestic Substances List (DSL)**

Substance is listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

Substance is not listed.

· Canadian Ingredient Disclosure list (limit 1%)

Substance is not listed.

· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:

Oxidizing

· Risk phrases:

Contact with combustible material may cause fire.

· Safety phrases:

Keep out of the reach of children.

Keep away from combustible material.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: Customer Service Centre: 1-866-385-5349**· Contact:** Canada Technical Services: 1-866-385-5349**· * Data compared to the previous version altered.**