

Material Safety Data Sheet

Printing date 02/15/2007

Version 1

Reviewed on 02/15/2007

*

1 Identification of substance

· **Product details**

- **Trade name:** ARGOSHIELD 2
- **Article number:** 148-02-0001BOC
- **Creation date:** 10/27/2006

· **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**

· **Dangerous components:**

7782-44-7	Oxygen	0-5%
-----------	--------	------

· **Chemical components**

7440-37-1	Argon	23-100%
-----------	-------	---------

3 Hazards identification

· **Hazard description:**

· **WHMIS-symbols:**

A - Compressed gas



· **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

· **NFPA ratings (scale 0 - 4)**



(Contd. on page 2)

Material Safety Data Sheet

Printing date 02/15/2007

Version 1

Reviewed on 02/15/2007

Trade name: ARGOSHIELD 2

(Contd. of page 1)

- **Information pertaining to particular dangers for man and environment:** Not applicable.
- **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.
Stop leak - ONLY if possible to do so without risk.
- **Measures for environmental protection:** Prevent seepage into sewage system, workpits and/or cellars.
- **Measures for cleaning/collecting:** Ensure adequate ventilation.
- **Additional information:** No dangerous substances are released.

* 7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Handle with care. Avoid jolting, friction, and impact.
Use only in well ventilated areas.
Store cylinders upright with valve protection cap in place and firmly secured to prevent falling or being knocked over.
If difficulty with operating cylinder valve is experienced discontinue use and contact supplier.
- **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:**
Sources of ignition should be removed from storage area.

(Contd. on page 3)

CDN

Material Safety Data Sheet

Printing date 02/15/2007

Version 1

Reviewed on 02/15/2007

Trade name: ARGOSHIELD 2

(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.
Safety showers and eyewash stations should be nearby.

- **Components with limit values that require monitoring at the workplace:**

7440-37-1 Argon (23-100%)

EL Simple asphyxiant

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Protective clothing should be kept free of oil and grease.
PPE should be inspected and maintained regularly to retain it's effectiveness.

- **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.

- **Eye protection:** Safety glasses

9 Physical and chemical properties

- **General Information**

Form:	Gaseous.
Color:	Colorless
Odor:	Odorless

- **Change in condition**

Boiling point/Boiling range: -185°C

- **Flash point:** Not applicable.

- **Danger of explosion:** Product does not present an explosion hazard.

10 Stability and reactivity

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

(Contd. on page 4)

Material Safety Data Sheet

Printing date 02/15/2007

Version 1

Reviewed on 02/15/2007

Trade name: ARGOSHIELD 2

(Contd. of page 3)

Dangerous products of decomposition: No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** LC50 - None available.
- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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
- **Identification number:** UN1956
- **Proper shipping name (technical name):** COMPRESSED GAS, N.O.S.

(Contd. on page 5)

CDN

Material Safety Data Sheet

Printing date 02/15/2007

Version 1

Reviewed on 02/15/2007

Trade name: ARGOSHIELD 2

(Contd. of page 4)

· **Label** 2.2

· **Maritime transport IMDG:**



- **IMDG Class:** 2
- **UN Number:** 1956
- **Label** 2.2
- **Marine pollutant:** No
- **Propper shipping name:** COMPRESSED GAS, N.O.S.

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 2
- **UN/ID Number:** 1956
- **Label** 2.2
- **Propper shipping name:** COMPRESSED GAS, N.O.S.

15 Regulations

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

(Contd. on page 6)

Material Safety Data Sheet

Printing date 02/15/2007

Version 1

Reviewed on 02/15/2007

Trade name: ARGOSHIELD 2

(Contd. of page 5)

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

· Product related hazard informations:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

· Safety phrases:

Keep in a cool place.

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.**

CDN