

### SECTION 1: Identification

#### 1.1. Product identifier

Product form	: Substance
Substance name	: Boron Trifluoride
Substance type	: Mono-constituent
CAS-No.	: 7637-07-2
Product code	: CA-1001-00070
Formula	: BF <sub>3</sub>
Synonym	: Borane, trifluoro-; Trifluoroborane; Boron fluoride
Product group	: Specialty Gases

#### 1.2. Recommended use and restrictions on use

Recommended use	: Manufacture of substances, Laboratory chemicals, Semiconductor
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#### 1.3. Supplier

Air Liquide Canada Inc.  
 1250, René Lévesque West Blvd. Suite 1700  
 H3B 5E6 Montreal, QC - Canada  
 T 1-800-817-7697  
[www.airliquide.ca](http://www.airliquide.ca)

#### 1.4. Emergency telephone number

Emergency number	: 514-878-1667
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### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

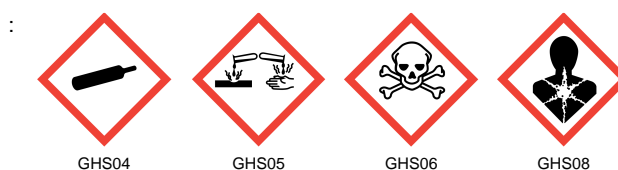
##### Classification (GHS-CA)

Gases under pressure : Compressed gas	H280
Acute toxicity (inhalation:gas) Category 2	H330
Skin corrosion/irritation, Category 1A	H314
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Specific target organ toxicity — Single exposure, Category 2	H371
Full text of H statements : see section 16	

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-CA labelling

Hazard pictograms (GHS-CA)



Signal word (GHS-CA)

: Danger

Hazard statements (GHS-CA)

: H280 - Contains gas under pressure; may explode if heated  
 H371 - May cause damage to organs  
 H318 - Causes serious eye damage  
 H330 - Fatal if inhaled  
 H314 - Causes severe skin burns and eye damage  
 CGA-HG11 - Symptoms may be delayed  
 CGA-HG22 - Corrosive to the respiratory tract

Precautionary statements (GHS-CA)

: P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.  
 P403 - Store in a well-ventilated place  
 P405 - Store locked up  
 P260 - Do not breathe dust/fume/gas/mist/vapours/spray  
 P202 - Do not handle until all safety precautions have been read and understood  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P284 - In case of inadequate ventilation wear respiratory protection  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P271 - Use only outdoors or in a well-ventilated area  
 EN (English)

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P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P307+P311 - If exposed: Call a poison center/doctor  
CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52 °C/125 °F  
CGA-PG05 - Use a back flow preventive device in the piping  
CGA-PG06 - Close valve after each use and when empty  
CGA-PG10 - Use only with equipment rated for cylinder pressure  
CGA-PG14 - Approach suspected leak area with caution  
CGA-PG18 - When returning cylinder, install leak tight valve outlet cap or plug  
CGA-PG21 - Open valve slowly

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS-CA)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : Mono-constituent

Name	Chemical name/Synonyms	Product identifier	%	Classification (GHS-CA)
Boron Trifluoride (Main constituent)		(CAS-No.) 7637-07-2	> 99.9	Press. Gas (Comp.), H280 Acute Tox. 2 (Inhalation:gas), H330 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 2, H371

Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Apply artificial respiration with bag and mask if breathing stopped. Get immediate medical advice/attention.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Get immediate medical advice/attention.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion : Ingestion is not considered a potential route of exposure.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Fatal if inhaled. Corrosive to the respiratory tract. May cause damage to organs (kidneys) (Inhalation).

Symptoms/effects after skin contact : Causes severe skin burns and eye damage.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : Ingestion is not considered a potential route of exposure.

Symptoms/effects upon intravenous administration : Not known.

Chronic symptoms : Adverse effects not expected from this product.

Most important symptoms and effects, both acute and delayed : Prolonged exposure to small concentrations may result in pulmonary oedema. May cause severe chemical burns to skin and cornea. Suitable first-aid treatment should be immediately available. Seek medical advice before using product. Corrosive to the respiratory tract. May cause severe chemical burns to cornea. Suitable first-aid treatment should be immediately available. Seek medical advice before using product. Delayed adverse effects possible. Refer to section 11.

### 4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : If you feel unwell, seek medical advice. If breathing is difficult, give oxygen.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

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according to the Hazardous Products Regulation (February 11, 2015)

### 5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use water jet to extinguish.

### 5.3. Specific hazards arising from the hazardous product

Fire hazard : The product is not flammable.  
Explosion hazard : Product is not explosive. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.  
Hazardous combustion products : None that are more hazardous than the product itself.

### 5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Exposure to fire may cause containers to rupture/explode.  
Protection during firefighting : Standard protective clothing and equipment (e.g. Self Contained Breathing Apparatus) for fire fighters. Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate ventilation.  
Personal Precautions, Protective Equipment and Emergency Procedures : EVACUATE ALL PERSONNEL FROM AFFECTED AREA. Use appropriate protective equipment. If leak is on user's equipment, be certain to purge piping before attempting repairs. If leak is on a container or container valve contact the closest Air Liquide Canada location.

### 6.2. Methods and materials for containment and cleaning up

For containment : Try to stop release if without risk.  
Methods for cleaning up : Dispose of contents/container in accordance with local/regional/national/international regulations.  
Methods and material for containment and cleaning up : Hose down area with water. Ventilate area. Wash contaminated equipment or sites of leaks with copious quantities of water.

### 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area.  
Hygiene measures : Do not eat, drink or smoke when using this product.  
Additional hazards when processed : Pressurized container: Do not pierce or burn, even after use. Use only with equipment rated for cylinder pressure. Close valve after each use and when empty.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.  
Storage conditions : Do not expose to temperatures exceeding 52 °C/ 125 °F. Keep container closed when not in use. Protect cylinders from physical damage; do not drag, roll, slide or drop. Store in well ventilated area. Store locked up.  
Incompatible products : None known.  
Incompatible materials : Alkali metals. Calcium oxide.  
Conditions for safe storage, including any incompatibilities : Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them from falling over. Stored containers should be periodically checked for general condition and leakage. Keep container below 50°C in a well ventilated place. Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Boron Trifluoride (7637-07-2)		
USA - ACGIH	ACGIH TWA (ppm)	0.1 ppm
USA - ACGIH	ACGIH Ceiling (ppm)	0.7 ppm
USA - OSHA	OSHA PEL (Ceiling) (mg/m³)	3 mg/m³
USA - OSHA	OSHA PEL (Ceiling) (ppm)	1 ppm
Canada (Quebec)	PLAFOND (mg/m³)	2.8 mg/m³
Canada (Quebec)	PLAFOND (ppm)	1 ppm

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according to the Hazardous Products Regulation (February 11, 2015)

Boron Trifluoride (7637-07-2)		
Alberta	OEL Ceiling (mg/m <sup>3</sup> )	2.8 mg/m <sup>3</sup>
Alberta	OEL Ceiling (ppm)	1 ppm
British Columbia	OEL Ceiling (ppm)	1 ppm
Manitoba	OEL Ceiling (ppm)	0.7 ppm
Manitoba	OEL TWA (ppm)	0.1 ppm
New Brunswick	OEL Ceiling (mg/m <sup>3</sup> )	2.8 mg/m <sup>3</sup>
New Brunswick	OEL Ceiling (ppm)	1 ppm
New Foundland & Labrador	OEL Ceiling (ppm)	0.7 ppm
New Foundland & Labrador	OEL TWA (ppm)	0.1 ppm
Nova Scotia	OEL Ceiling (ppm)	0.7 ppm
Nova Scotia	OEL TWA (ppm)	0.1 ppm
Nunavut	OEL Ceiling (ppm)	1 ppm
Northwest Territories	OEL Ceiling (ppm)	1 ppm
Ontario	OEL Ceiling (ppm)	1 ppm
Prince Edward Island	OEL Ceiling (ppm)	0.7 ppm
Prince Edward Island	OEL TWA (ppm)	0.1 ppm
Saskatchewan	OEL Ceiling (ppm)	1 ppm
Yukon	OEL Ceiling (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Yukon	OEL Ceiling (ppm)	1 ppm

### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure exposure is below occupational exposure limits (where available). Provide adequate general and local exhaust ventilation. Systems under pressure should be regularly checked for leakages. Consider the use of a work permit system e.g. for maintenance activities. Alarm detectors should be used when toxic gases may be released.
- Environmental exposure controls : Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Gloves. Safety glasses. Protective clothing. Safety shoes. Respiratory protection.

#### Hand protection:

Wear working gloves when handling gas containers. Wear chemically resistant protective gloves when making or breaking process connections.

#### Eye protection:

Wear safety glasses with side shields. Wear goggles and a face shield when transfilling or breaking transfer connections.

#### Skin and body protection:

Wear suitable protective clothing, e.g. lab coats, coveralls or flame resistant clothing.

#### Respiratory protection:

Wear a respirator when performing non-routine tasks not limited to line breaking or sampling. Wear a respirator during routine operations if determined to be necessary during a process-specific review. Consult respirator suppliers' product information or their representatives for the selection of the appropriate respirator. See Sections 5 & 6.



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## Safety Data Sheet

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### Thermal hazard protection:

None necessary during routine operations.

### Appropriate engineering controls:

Ensure exposure is below occupational exposure limits (where available). Provide adequate general and local exhaust ventilation. Systems under pressure should be regularly checked for leakages. Consider work permit system e.g. for maintenance activities. Alarm detectors should be used when toxic gases may be released.

### Environmental exposure controls:

Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

### Other information:

Keep suitable chemically resistant protective clothing readily available for emergency use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Clear, colorless gas.
Colour	: Colourless
Odour	: Pungent.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: Not applicable for gases and gas mixtures.
Molecular mass	: 67.82 g/mol
Melting point	: No data available
Freezing point	: -129 °C
Boiling point	: -100 °C
Flash point	: Not applicable (non-flammable gas)
Critical temperature	: -11.35 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: See Section 2.1 and 2.2
Vapour pressure	: 40.7 hPa -13°C
Vapour pressure at 50 °C	: No data available
Critical pressure	: 4980 kPa
Relative vapour density at 20 °C	: 2.38
Relative density	: 1.6
Density	: 2.84 kg/m³ (at 15 °C)
Relative gas density	: Heavier than air
Solubility	: Water: No data available
Log Pow	: Not applicable for inorganic gases.
Viscosity, kinematic	: Not applicable.
Viscosity, dynamic	: Not applicable.
Explosive properties	: Not applicable (non-flammable gas).
Oxidising properties	: None.
Explosive limits	: Not applicable (non-flammable gas)

### 9.2. Other information

Gas group	: Compressed gas
Additional information	: Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	: None known.
Chemical stability	: Stable under normal conditions.

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according to the Hazardous Products Regulation (February 11, 2015)

Possibility of hazardous reactions	: None known.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).
Incompatible materials	: Alkali metals. Calcium oxide.
Hazardous decomposition products	: Under normal conditions of storage and use hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Inhalation:gas: Fatal if inhaled.

Boron Trifluoride ( \f )7637-07-2	
LC50 inhalation rat (ppm)	432 ppm/4h
ATE CA (gases)	432.00000000 ppmv/4h
ATE CA (vapours)	1.18000000 mg/l/4h
ATE CA (dust,mist)	1.18000000 mg/l/4h

Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation. May cause damage to organs.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

Boron Trifluoride (7637-07-2)	
LC50-96 h - fish [mg/l]	125 - 600 mg/l
EC50 Daphnia 1	21.3 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 48h - Daphnia magna [mg/l]	73 - 226 mg/l
EC50 72h Algae [mg/l]	17.5 mg/l

#### 12.2. Persistence and degradability

Boron Trifluoride (7637-07-2)	
Persistence and degradability	Hydrolyses. Not applicable for inorganic gases.

#### 12.3. Bioaccumulative potential

Boron Trifluoride (7637-07-2)	
Log Pow	Not applicable for inorganic gases.
Bioaccumulative potential	No data available.

#### 12.4. Mobility in soil

Boron Trifluoride (7637-07-2)	
Log Pow	Not applicable for inorganic gases.
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.

#### 12.5. Other adverse effects

Other adverse effects	: May cause pH changes in aqueous ecological systems.
Effect on ozone layer	: No known effects from this product.

# Boron Trifluoride

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

- Waste treatment methods : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded.
- Product/Packaging disposal recommendations : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at [www.cganet.com](http://www.cganet.com) for more guidance on suitable disposal methods.

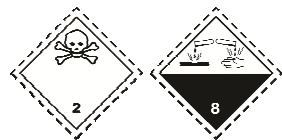
### SECTION 14: Transport information

#### 14.1. Basic shipping description

##### In accordance with TDG

##### Transportation of Dangerous Goods

- UN-No. (TDG) : UN1008
- TDG Primary Hazard Classes : 2.3 - Class 2.3 - Toxic Gas.
- TDG Subsidiary Classes : 8
- Transport Document Description : UN1008 BORON TRIFLUORIDE, 2.3 (8)
- Proper Shipping Name : BORON TRIFLUORIDE
- Hazard labels (TDG) : 2.3 - Toxic gases  
8 - Corrosive substances



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### TDG Special Provisions

: 23 - (1) A consignor of these dangerous goods must include, except for UN1005, ANHYDROUS AMMONIA, the words "toxic by inhalation" or "toxic — inhalation hazard" or "toxique par inhalation" or "toxicité par inhalation" in the following places, unless the words are already part of the shipping name: (a) on a shipping document, immediately after the description of the dangerous goods; (b) on a small means of containment, next to the shipping name of the dangerous goods; and (c) on a large means of containment, next to the placard for the primary class of the dangerous goods or the placard for the subsidiary class, if any. For example, the notation on a shipping document would be "UN1935, CYANIDE SOLUTION, N.O.S, Class 6.1, PG I, toxic by inhalation". (2) This special provision does not apply to a person who transports these dangerous goods in accordance with an exemption set out in sections 1.15, 1.17 or 1.17.1 of Part 1 (Coming Into Force, Repeal, Interpretation, General Provisions and Special Cases). (3) A consignor of UN1005, ANHYDROUS AMMONIA, must include the words "inhalation hazard" or "dangereux par inhalation": (a) on a shipping document, immediately after the shipping name of the dangerous goods; and (b) on a small means of containment, next to the shipping name of the dangerous goods. When UN1005, ANHYDROUS AMMONIA, is contained in a large means of containment on which is affixed the anhydrous ammonia placard, the words "Anhydrous Ammonia, Inhalation Hazard" or "Ammoniac anhydre, dangereux par inhalation" must be displayed next to the placard in accordance with paragraph 4.18.2(b).

SOR/2014-306

145 - (1) Neutron radiation detectors containing non-pressurized boron trifluoride gas may be transported under this shipping name if (a) the absolute pressure in each detector does not exceed 105 kPa at 20°C; (b) the amount of gas does not exceed 13 g per detector; (c) each detector is manufactured under a quality assurance program; ISO 9001:2008 is an example of a quality assurance program. (d) each detector is of welded metal construction with brazed metal to ceramic feed through assemblies; (e) each detector has a minimum burst pressure of 1 800 kPa, demonstrated by design type qualification testing; and (f) each detector is tested to a 1 × 10<sup>-10</sup> cm<sup>3</sup>/s leaktightness standard before being filled. (2) Neutron radiation detectors containing non-pressurized boron trifluoride gas transported as individual components must be offered for transport and transported as follows: (a) they must be packed in a sealed intermediate plastics liner with sufficient absorbent material to absorb the entire gas contents; (b) they must be packed in a strong outer means of containment; (c) in their outer means of containment, they must be capable of withstanding a 1.8 m drop test without any leakage of the gas contained in the detectors; and (d) the total amount of gas contained in all the detectors in each outer means of containment must not exceed 52 g. (3) Completed neutron radiation detection systems containing detectors that meet the requirements of subsection (1) must be offered for transport and transported as follows: (a) the detectors must be housed in a strong sealed outer casing; (b) the casing must contain sufficient absorbent material to absorb the entire gas contents of the detectors; and (c) unless the outer casing affords equivalent protection, the completed systems must be packed in a strong outer means of containment capable of withstanding a 1.8 m drop test without any leakage of the gas contained in the detectors. (4) The shipping document must include the statement "Transported in accordance with special provision 145" or "Transporté conformément à la disposition special 145". (5) These Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to (a) neutron radiation detectors, including those with solder glass joints, containing not more than 1 g of boron trifluoride gas, if they may be transported under this shipping name under subsection (1) and are packed in accordance with subsection (2); and (b) radiation detection systems containing detectors described in paragraph (a) if the systems are packed in accordance with subsection (3).

SOR/2014-306

ERAP Index : 50  
Explosive Limit and Limited Quantity Index : 0  
Passenger Carrying Ship Index : Forbidden  
Excepted quantities (TDG) : E0  
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : Forbidden

### 14.2. Transport information/DOT - USA

#### Department of Transport

DOT NA no. : UN1008  
UN-No.(DOT) : 1008  
  
Transport Document Description : UN1008 Boron trifluoride, 2.3 (8)  
Proper Shipping Name (DOT) : Boron trifluoride  
Contains Statement Field Selection (DOT) : DOT\_TECHNICAL - Proper Shipping Name - Technical (DOT)  
  
Class (DOT) : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115  
Division (DOT) : 2.3



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according to the Hazardous Products Regulation (February 11, 2015)

Hazard labels (DOT) : 2.3 - Poison gas  
8 - Corrosive



Dangerous for the environment : No

DOT Special Provisions (49 CFR 172.102) : 2 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone B (see 173.116(a) or 173.133(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.  
B9 - Bottom outlets are not authorized.  
B14 - Each bulk packaging, except a tank car or a multi-unit-tank car tank, must be insulated with an insulating material so that the overall thermal conductance at 15.5 C (60 F) is no more than 1.5333 kilojoules per hour per square meter per degree Celsius (0.075 Btu per hour per square foot per degree Fahrenheit) temperature differential. Insulating materials must not promote corrosion to steel when wet.

DOT Packaging Exceptions (49 CFR 173.xxx) : None

DOT Packaging Non Bulk (49 CFR 173.xxx) : 302

DOT Packaging Bulk (49 CFR 173.xxx) : 314;315

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : Forbidden

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : Forbidden

DOT Vessel Stowage Location : D - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

Emergency Response Guide (ERG) Number : 125

Special transport precautions : 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 there is adequate ventilation. - Ensure that containers are firmly secured. - Ensure cylinder valve is closed and not leaking. - Ensure valve outlet cap nut or plug (where provided) is correctly fitted. - Ensure valve protection device (where provided) is correctly fitted.

Other information : No supplementary information available.

### 14.3. Air and sea transport

#### IMDG

UN-No. (IMDG) : 1008

Proper Shipping Name (IMDG) : BORON TRIFLUORIDE

Transport Document Description (IMDG) : UN 1008 BORON TRIFLUORIDE, 2.3 (8)

Class (IMDG) : 2 - Gases

MFAG-No : 125

Ship Safety Act : Gases under pressure/Gases toxic under pressure(Dangerous Goods Notification Schedule first second and third Article Dangerous Goods Regulations)

Port Regulation Law : Hazardous materials/High pressure gas (Article 21, Paragraph 2 of Law, Article 12 rule, notice attached table that defines the type of dangerous goods)

#### IATA

UN-No. (IATA) : 1008

Proper Shipping Name (IATA) : Boron trifluoride

Transport Document Description (IATA) : UN 1008 Boron trifluoride, 2.3 (8)

Class (IATA) : 2

Civil Aeronautics Law : Gases under pressure/Gases toxic under pressure(Hazardous materials notice Appended Table 1 Article 194 of the Enforcement Regulations)

## SECTION 15: Regulatory information

# Boron Trifluoride

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### 15.1. National regulations

#### Boron Trifluoride (7637-07-2)

Listed on the Canadian DSL (Domestic Substances List)

### 15.2. International regulations

#### Boron Trifluoride (7637-07-2)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Korean ECL (Existing Chemicals List)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Japanese Poisonous and Deleterious Substances Control Law  
Japanese Pollutant Release and Transfer Register Law (PRTR Law)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

## SECTION 16: Other information

Date of issue : 05/18/2017

Full text of H-statements:

H280	Contains gas under pressure; may explode if heated
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H330	Fatal if inhaled
H335	May cause respiratory irritation
H371	May cause damage to organs

SDS Canada (GHS)

THE INFORMATION, RECOMMENDATIONS AND DATA CONTAINED IN THIS DOCUMENT ARE INTENDED TO BE USED BY PROPERLY TRAINED AND QUALIFIED PERSONNEL ONLY AND AT THEIR SOLE RISKS AND DISCRETION. THE INFORMATION, RECOMMENDATIONS AND DATA HEREIN CONTAINED ARE DERIVED FROM SOURCES WHICH WE BELIEVE TO BE RELIABLE. HOWEVER, AIR LIQUIDE CANADA INC. MAKES NO REPRESENTATION AND GIVES NO WARRANTY OF ANY KIND WHATSOEVER WITH RESPECT TO THEIR ACCURACY OR COMPLETENESS AND ASSUMES NO LIABILITY FOR DAMAGES OR LOSS ARISING DIRECTLY OR INDIRECTLY FROM THEIR USE, WHETHER PROPER OR IMPROPER.