

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 07/31/2015 Version: 2.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance
Substance name : Methyl Bromide
CAS No : 74-83-9
Product code : SG-1001-01086

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

Use of the substance/mixture : Test gas/Calibration gas.

#### 1.3. Details of the supplier of the safety data sheet

Air Liquide 2700 Post Oak Boulevard Houston, TX 77056 - USA T 1-800-819-1704 www.us.airliquide.com

### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

### **SECTION 2: Hazards identification**

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

### **GHS-US** classification

Flam. Gas 2	H221
Liquefied gas	H280
Acute Tox. 2 (Inhalation:gas)	H330
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Muta. 2	H341
STOT SE 3	H335
STOT RE 2	H373
Ozone 1	H420

Full text of H-phrases: see section 16

### 2.2. Label elements

### **GHS-US** labeling

Hazard pictograms (GHS-US)







GHS04

GHS06

GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H221 - Flammable gas

H280 - Contains gas under pressure; may explode if heated

H315 - Causes skin irritation H319 - Causes serious eye irritation

H330 - Fatal if inhaled

H335 - May cause respiratory irritation H341 - Suspected of causing genetic defects

H373 - May cause damage to organs (central nervous system, kidneys, liver, lung) through

prolonged or repeated exposure

H420 - Harms public health and the environment by destroying ozone in the upper atmosphere

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking

P260 - Do not breathe gas

P264 - Wash ... thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, face protection, protective gloves, protective clothing

P284 - Wear respiratory protection. Consult respirator supplier's product information for the

08/03/2015 EN (English US) Page 1

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

selection of the appropriate respiratory protection.

P302+P352 - If on skin: Wash with plenty of water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P308+P313 - If exposed or concerned: Get medical advice/attention

P312 - Call a poison center/doctor/... if you feel unwell

P320 - Specific treatment is urgent (see First aid measures on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention

P362 - Take off contaminated clothing and wash it before reuse

P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely

P381 - Eliminate all ignition sources if safe to do so

P403 - Store in a well-ventilated place

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P410+P403 - Protect from sunlight. Store in a well-ventilated place

P501 - Dispose of contents/container in accordance with local/regional/national/international

regulations

P502 - Refer to manufacturer/supplier for information on recovery/recycling

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name	Product identifier	%	GHS-US classification
Methyl Bromide (Main constituent)	(CAS No) 74-83-9	> 99	Flam. Gas 2, H221 Liquefied gas, H280 Acute Tox. 2 (Inhalation:gas), H330 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Muta. 2, H341 STOT SE 3, H335 STOT RE 2, H373 Ozone 1, H420

Full text of H-phrases: see section 16

#### 3.2. Mixture

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 or 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. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. If eye irritation occurs, seek medical attention.

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

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : Fatal if inhaled. May cause respiratory irritation.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

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

Symptoms/injuries upon intravenous

administration

: Not known.

Chronic symptoms : Suspected of causing genetic defects. May cause damage to organs (central nervous system,

kidneys, liver, lung) through prolonged or repeated exposure.

08/03/2015 EN (English US) 2/10

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 4.3. Indication of any immediate medical attention and special treatment needed

If you feel unwell, seek medical advice. If breathing is difficult, give oxygen.

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

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

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

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : This product is flammable.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of

burns and injuries. May form flammable/explosive vapor-air mixture.

Reactivity : None known.

#### 5.3. Advice for firefighters

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.

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.

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment consistent with the site emergency plan.

Emergency procedures : Escape the danger area by the closest safe route. Close doors and windows of adjacent

premises. Keep containers closed. Mark the danger area. Seal off low-lying areas. Keep

upwind.

### 6.1.2. For emergency responders

Protective equipment : Standard protective clothing and equipment (e.g., Self Contained Breathing Apparatus) for fire

fighters. Equip cleanup crew with proper protection.

Emergency procedures : Evacuate and limit access. Ventilate area. Remove ignition sources. Monitor concentration of

released product. Consider the risk of potentially explosive atmospheres. Wear self-contained breathing apparatus when entering atmospheres of unknown contaminant concentration until

proven to be safe.

#### 6.2. Environmental precautions

Try to stop release if safe to do so.

### 6.3. Methods and material for containment and cleaning up

For containment : Try to stop release if safe to do so.

Methods for cleaning up : Dispose of this material and its container in accordance with local regulations.

#### 6.4. Reference to other sections

See also Sections 8 and 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : Pressurized container: Do not pierce or burn, even after use. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Handle empty containers with care

pressure. Close valve after each use and when empty. Handle empty containers with care because residual vapors are flammable. In use, may form flammable vapor-air mixture.

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. Keep away from heat/sparks/open flames/hot surfaces. – No smoking

in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Use only non-sparking tools.

Hygiene measures : Do not eat, drink or smoke when using this product.

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

Technical measures : Comply with applicable regulations. Proper grounding procedures to avoid static electricity

should be followed

Storage conditions : Do not expose to temperatures exceeding 52°C (125°F). Keep container closed when not in use. Protect cylinder from physical damage. Store in well ventilated area. Store locked up.

08/03/2015 EN (English US) 3/10

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Incompatible products : None known.

Incompatible materials : Oxidizing materials. Air.

#### 7.3. Specific end use(s)

See Section 1.2.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

Methyl Bromide (74-83-9)		
ACGIH	ACGIH TWA (ppm)	1 ppm
OSHA	OSHA PEL (Ceiling) (mg/m³)	80 mg/m³
OSHA	OSHA PEL (Ceiling) (ppm)	20 ppm

#### 8.2. Exposure controls

Appropriate engineering controls : Ensure exposure is below occupational exposure limits. 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.

Hand protection : Wear working gloves when handling gas containers. 29 CFR 1910.138: Hand Protection.

Eye protection : Wear safety glasses with side shields. 29 CFR 1910.133: Eye and Face Protection.

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 san

: 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.

Thermal hazard protection : None necessary during normal and routine operations.

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 : Wear safety shoes while handling containers. 29 CFR 1910.136: Foot Protection.

### SECTION 9: Physical and chemical properties

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

Physical state : Gas

Appearance : Colorless gas.
Color : Colorless
Odor : Sweetish.

Odor threshold : No data available pH : No data available

Melting point : -93.6 °C

Freezing point : No data available

Boiling point : 4.45 °C

Critical temperature : 191.85 °C

Critical pressure : 6610 kPa

Flash point : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Relative evaporation rate (ether=1) : Not applicable for gases and gas-mixtures.

Flammability (solid, gas) : See Section 2.1 and 2.2

Explosion limits : 8.6 - 20 vol %

Explosive properties : Without adequate ventilation formation of explosive mixtures may be possible.

Oxidizing properties : None.

Vapor pressure : 877.16 mbar

Relative density : No data available

Relative vapor density at 20 °C : 1.732

Specific gravity / density : 1.6755 g/cm³ (at 20 °C)

Molecular mass : 94.95 g/mol Relative gas density : 3.1 (Heavier than air)

08/03/2015 EN (English US) 4/10

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Solubility : Water: 17250 mg/l

Log Pow : 1.19

Log Kow : No data available

Auto-ignition temperature : 535 °C

Decomposition temperature : No data available Viscosity : No data available Viscosity, kinematic : Not applicable. Viscosity, dynamic : Not applicable.

9.2. Other information

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

None known.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Can form explosive mixture with air.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

May react with bases, copper, silver, mercury, magnesium, zinc and their alloys. May react with aluminium. Reacts with water to form corrosive acids. May react violently with alkalis. For additional information on compatibility refer to ISO 11114.

#### 10.6. 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 : Inhalation:gas: Fatal if inhaled.

Methyl Bromide (74-83-9)	
LD50 oral rat	214 mg/kg
LC50 inhalation rat (ppm)	425 ppm/4h
ATE US (oral)	214.000 mg/kg body weight
ATE US (gases)	425.000 ppmV/4h
Skin corrosion/irritation	: Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Suspected of causing genetic defects.

Carcinogenicity : Not classified

Methyl Bromide (74-83-9)	
IARC group	3 - Not classifiable
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) : May cause damage to organs (central nervous system, kidneys, liver, lung) through prolonged or repeated exposure.

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : Fatal if inhaled. May cause respiratory irritation.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

08/03/2015 EN (English US) 5/10

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

Symptoms/injuries upon intravenous

administration

: Not known.

Chronic symptoms Suspected of causing genetic defects. May cause damage to organs (central nervous system,

kidneys, liver, lung) through prolonged or repeated exposure.

### **SECTION 12: Ecological information**

#### **Toxicity**

Ecology - general : Very toxic to aquatic life.

Methyl Bromide (74-83-9)	
LC50 fish 1	11 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	2 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	3.2 mg/l (Exposure time: 48 h - Species: Scenedesmus quadricauda)
LC50 fish 2	0.8 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])
EC50 Daphnia 2	1.7 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

#### Persistence and degradability

No additional information available

#### **Bioaccumulative potential** 12.3.

Methyl Bromide (74-83-9)	
Log Pow	1.19
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.

#### 12.4. Mobility in soil

Methyl Bromide (74-83-9)	
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.

#### Other adverse effects

Other adverse effects : May cause pH changes in aqueous ecological systems.

Effect on ozone layer Hazardous to the ozone laver

Harms public health and the environment by destroying ozone in the upper atmosphere

CFC group : VI Ozone depletion factor [R11=1] : 0.6 : 5 Global warming potential [CO2=1]

### **SECTION 13: Disposal considerations**

### Waste treatment methods

Waste treatment methods Contact supplier if guidance is required. Do not discharge into any place where its

accumulation could be dangerous. Toxic and corrosive gases formed during combustion should be scrubbed before discharge to atmosphere. Ensure that the emission levels from local regulations or operating permits are not exceeded. Waste gas should be flared through a suitable burner with flash back arrestor. Do not discharge into areas where there is a risk of

forming an explosive mixture with air.

Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for more Waste disposal recommendations

guidance on suitable disposal methods.

### **SECTION 14: Transport information**

### **Department of Transportation (DOT)**

In accordance with DOT

Transport document description : UN1062 Methyl bromide, 2.3

UN-No.(DOT) : UN1062 Proper Shipping Name (DOT) : Methyl bromide

Transport hazard class(es) (DOT) : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115

08/03/2015 EN (English US) 6/10

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard labels (DOT) : 2.3 - Poison gas



DOT Packaging Non Bulk (49 CFR 173.xxx) : 193
DOT Packaging Bulk (49 CFR 173.xxx) : 314;315

DOT Special Provisions (49 CFR 173.xxx) : 314

: 3 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone C (see 173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.

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.

N86 - UN pressure receptacles made of aluminum alloy are not authorized.

T50 - When portable tank instruction T50 is referenced in Column (7) of the 172.101 Table, the applicable liquefied compressed gases are authorized to be transported in portable tanks in

accordance with the requirements of 173.313 of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) : None
DOT Quantity Limitations Passenger aircraft/rail : Forbidden

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : Forbidden

CFR 175.75)

**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"

#### **Additional information**

Emergency Response Guide (ERG) Number

Other information

Special transport precautions

ner information : No supplementary information available.

: 123

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.

ADR

Transport document description : UN 1062, 2.3, (C/D)

Class (ADR) : 2 - Gases Hazard identification number (Kemler No.) : 26

Classification code (ADR) : 2T

Hazard labels (ADR) : 2.3 - Toxic gases



Orange plates

26 1062

Tunnel restriction code (ADR) : C/D
Limited quantities (ADR) : 0
Excepted quantities (ADR) : E0

08/03/2015 EN (English US) 7/10

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transport by sea

UN-No. (IMDG) : 1062

Proper Shipping Name (IMDG) : METHYL BROMIDE

Class (IMDG) : 2 - Gases MFAG-No : 123

Air transport

UN-No. (IATA) : Forbidden

### **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

Methyl Bromide (74-83-9)	
Listed on the United States TSCA (Toxic Substances Control Act) in Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 3	•
SARA Section 302 Threshold Planning Quantity (TPQ)	1000
SARA Section 313 - Emission Reporting	1.0 %

### 15.2. International regulations

#### **CANADA**

O7 (1 07 127 1	
Methyl Bromide (74-83-9)	
Listed on the Canadian DSL (Domestic Sustance	s List)
WHMIS Classification	Class A - Compressed Gas Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class E - Corrosive Material

#### **EU-Regulations**

### Methyl Bromide (74-83-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Gas 2	H221
Liquefied gas	H280
Acute Tox. 2 (Inhalation:gas)	H330
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Muta. 2	H341
STOT SE 3	H335
STOT RE 2	H373
Aquatic Chronic 1	H410
Ozone 1	H420

Full text of H-phrases: see section 16

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Muta.Cat.3; R68 T; R23/25 Xn; R48/20 Xi; R36/37/38 N; R50 N; R59

Full text of R-phrases: see section 16

08/03/2015 EN (English US) 8/10

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### **National regulations**

### Methyl Bromide (74-83-9)

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 Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Japanese ISHL (Industrial Safety and Health Law)

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)

Japanese Poisonous and Deleterious Substances Control Law

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

### 15.3. US State regulations

13.3. 03 State regulations	
Methyl Bromide(74-83-9)	
U.S California - Proposition 65 - Carcinogens List	No
U.S California - Proposition 65 - Developmental Toxicity	Yes
U.S California - Proposition 65 - Reproductive Toxicity - Female	No
U.S California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S Massachusetts - Right To Know List U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S Pennsylvania - RTK (Right to Know) List

### SECTION 16: Other information

Indication of changes

: Revised safety data sheet in accordance with OSHA final rule on GHS implementation promulgated March 26, 2012.

Other information

: This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product.

#### Full text of H-phrases:

Acute Tox. 2 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Gas 2	Flammable gases Category 2
Liquefied gas	Gases under pressure Liquefied gas
Muta. 2	Germ cell mutagenicity Category 2
Ozone 1	Hazardous to the ozone layer Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H221	Flammable gas
H280	Contains gas under pressure; may explode if heated
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H373	May cause damage to organs through prolonged or repeated exposure
H420	Harms public health and the environment by destroying ozone in the upper atmosphere

SDS US (GHS HazCom 2012)

08/03/2015 EN (English US) 9/10

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of Air Liquide America Corporation's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this product is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.

08/03/2015 EN (English US) 10/10