## Safety Data Sheet



## Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

#### 1.1 Product identifier

**Product Name** Dimethyl Sulfide (0.0001-0.0002%), Ethylene(Balance)

M-D201/E-1 **Product Code** 

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

Relevant identified use(s) Please provide product use

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

Manufacturer Air Liquide

> 2700 Post Oak Blvd. Houston, TX 77056 **United States**

www.us.airliquide.com sds@airliquide.com

Telephone (Technical) • 713-896-2896 Telephone (Technical) • 800-819-1704

## 1.4 Emergency telephone number

Manufacturer 800-424-9300 Manufacturer +1 703-527-3887

#### Section 2: Hazards Identification

#### EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010] According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

#### 2.1 Classification of the substance or mixture

**CLP** Flammable Gases 1 - H220 Compressed Gas - H280

Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336

DSD/DPD Extremely Flammable (F+)

R12, R67

#### 2.2 Label Elements

**CLP** 

#### **DANGER**







Hazard statements . H220 - Extremely flammable gas

H280 - Contains gas under pressure; may explode if heated

H336 - May cause drowsiness or dizziness

## **Precautionary statements**

**Prevention** • P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.

P261 - Avoid breathing gas.

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

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

P381 - Eliminate all ignition sources if safe to do so.

P304+P340 - IF INHĂLED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P312 - Call a POISON ČENTER or doctor/physician if you feel unwell.

**Storage/Disposal** • P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of content and/or container in accordance with local, regional,

national, and/or international regulations.

#### DSD/DPD



**Risk phrases** • R12 - Extremely flammable.

R67 - Vapours may cause drowsiness and dizziness.

Safety phrases • S9 - Keep container in a well ventilated place

S16 - Keep away from sources of ignition - No Smoking.

#### 2.3 Other Hazards

**CLP** This material is a simple asphyxiant. May displace or reduce oxygen available for

breathing especially in confined spaces.

According to Regulation (EC) No. 1272/2008 (CLP) this material is considered

hazardous.

DSD/DPD This material is a simple asphyxiant. May displace or reduce oxygen available for

breathing especially in confined spaces.

According to European Directive 1999/45/EC this preparation is considered

dangerous.

### United States (US)

According to OSHA 29 CFR 1910,1200 HCS

#### 2.1 Classification of the substance or mixture

**OSHA HCS 2012** 

Flammable Gases 1 - H220 Compressed Gas - H280 Eve Irritation 2A - H319

Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336

Simple Asphyxiant

## 2.2 Label elements

**OSHA HCS 2012** 

#### DANGER







Hazard statements • Extremely flammable gas - H220

Contains gas under pressure; may explode if heated - H280

Causes serious eve irritation - H319 May cause drowsiness or dizziness - H336 May displace oxygen and cause rapid suffocation.

## **Precautionary statements**

Prevention • Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. - P210 Avoid breathing gas. - P261

Wash thoroughly after handling. - P264

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

Wear protective gloves/protective clothing/eye protection/face protection. - P280

Response .

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

Eliminate all ignition sources if safe to do so. - P381

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P340

Call a POISON CENTER or doctor/physician if you feel unwell. - P312

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing. - P305+P351+P338 If eye irritation persists: Get medical advice/attention. - P337+P313

Storage/Disposal .

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

Store locked up. - P405

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

## 2.3 Other hazards

**OSHA HCS 2012** 

Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

#### Canada

According to WHMIS

### 2.1 Classification of the substance or mixture

**WHMIS** 

Compressed Gas - A Flammable Gases - B1 Other Toxic Effects - D2B

## 2.2 Label elements

**WHMIS** 







Compressed Gas - A Flammable Gases - B1 Other Toxic Effects - D2B

## 2.3 Other hazards

**WHMIS** 

This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

## Section 3 - Composition/Information on Ingredients

#### 3.1 Substances

Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

#### 3.2 Mixtures

|                     | Composition                            |                       |   |  |  |  |  |
|---------------------|--|-----------------------|---|--|--|--|--|
| Chemical<br>Name    | Identifiers                            | %                     | LD50/LC50   | Classifications According to Regulation/Directive  |  |  |  |
| Dimethyl<br>Sulfide | CAS:75-18-3<br>EC Number:200-<br>846-2 | 0.0001% TO<br>0.0002% | Ingestion/Oral-Rat LD50 • 3300 mg/kg Inhalation-Rat LC50 • 40250 ppm Skin-Rabbit LD50 • >5 g/kg | EU DSD/DPD: Self Classified: F, R11; Xi, R36, R67<br>EU CLP: Self Classified: Flam. Liq. 2, H225; Eye Irrit. 2,<br>H319; STOT SE 3: Narc., H336<br>OSHA HCS 2012: Flam. Liq. 2; Eye Irrit. 2A; STOT SE 3:<br>Narc. |  |  |  |
| Ethylene            | CAS:74-85-1<br>EC Number:200-<br>815-3 | Balance               | Ingestion/Oral-Rat LD50 • 3300 mg/kg Skin-Rabbit LD50 • >5 g/kg                                 | EU DSD/DPD: Annex I: F+; R12 R67 EU CLP: Annex VI: Flam. Gas 1, H220; Press. Gas - Comp., H280, STOT SE 3: Narc., H336 OSHA HCS 2012: Eye Irrit. 2A; Press. Gas - Comp.; Flam. Gas 1; STOT SE 3: Narc.             |  |  |  |

See Section 16 for full text of H-statements and R-phrases.

### **Section 4 - First Aid Measures**

## 4.1 Description of first aid measures

Inhalation

 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

 Although exposure is unlikely, in case of contact immediately flush skin with running water. If skin irritation develops get medical advice/attention.

Eve

Skin

 First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If eye irritation persists: Get medical advice/attention.

Ingestion

Ingestion is not considered a potential route of exposure.

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

Refer to Section 11 - Toxicological Information.

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

**Notes to Physician** 

 All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

#### 4.4 Other information

• Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO GASES WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus must be worn. Victim(s) who experience any adverse effect after over-exposure to this gas mixture must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and the MSDS to physician or other health professional with victim(s).

## **Section 5 - Firefighting Measures**

## 5.1 Extinguishing media

**Suitable Extinguishing Media** • SMALL FIRES: Dry chemical or CO2. LARGE FIRES: Water spray or fog.

Unsuitable Extinguishing Media

No data available

## 5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion • EXTREMELY FLAMMABLE

#### **Hazards**

Will form explosive mixtures with air.

Vapors may travel to source of ignition and flash back.

Cylinders exposed to fire may vent and release flammable gas through pressure relief devices.

Containers may explode when heated.

Ruptured cylinders may rocket.

## Hazardous Combustion Products

Toxic fumes of sulfur oxides and carbon monoxide.

### 5.3 Advice for firefighters

 Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Wear positive pressure self-contained breathing apparatus (SCBA).

DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED Move containers from fire area if you can do it without risk.

FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

FIRE INVOLVING TANKS: ALWAYS stay away from tanks engulfed in fire.

FIRE INVOLVING TANKS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

FIRE INVOLVING TANKS: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

FIRE INVOLVING TANKS: Cool containers with flooding quantities of water until well after fire is out.

FIRE INVOLVING TANKS: Do not direct water at source of leak or safety devices; icing may occur.

FIRE INVOLVING TANKS: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## **Section 6 - Accidental Release Measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

#### **Personal Precautions**

 Ventilate the area before entry. Do not walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

#### **Emergency Procedures**

 ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 800 meters (1/2 mile) Keep unauthorized personnel away. Keep out of low areas. Stay upwind.

### 6.2 Environmental precautions

Prevent spreading of vapors through sewers, ventilation systems and confined areas.

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

## Containment/Clean-up Measures

All equipment used when handling the product must be grounded.

Stop leak if you can do it without risk.

If possible, turn leaking containers so that gas escapes rather than liquid. Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.

Do not direct water at spill or source of leak. Isolate area until gas has dispersed.

#### 6.4 Reference to other sections

 Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

## Section 7 - Handling and Storage

## 7.1 Precautions for safe handling

#### Handling

• Keep away from heat and ignition sources – No Smoking. Take precautionary measures against static charges. All equipment used when handling the product must be grounded. Use only non-sparking tools. Use only with adequate ventilation. Ventilate closed spaces before entering. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing gas. Be aware of any signs of dizziness or fatigue, especially if work is done in a poorly ventilated area; exposures to fatal concentrations of this gas mixture could occur without any significant warning symptoms, due to olfactory fatigue or oxygen deficiency. Cylinders should be firmly secured to prevent falling or being knocked-over. Use explosion-proof - electrical, ventilating and/or lighting equipment. Do not attempt to repair, adjust, or in any other way modify cylinders. If there is a malfunction or another type of operational problem, contact nearest distributor immediately. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container.

## 7.2 Conditions for safe storage, including any incompatibilities

#### **Storage**

Cylinders should be stored in dry, well-ventilated areas away from sources of heat, ignition and direct sunlight. Do not allow area where cylinders are stored to exceed 52C (125F). Cylinders must be protected from the environment, and preferably kept at room temperature approximately 21C (70F). Protect cylinders against physical damage. Cylinders should be firmly secured to prevent falling or being knocked-over. Store locked up.

## 7.3 Specific end use(s)

Refer to Section 1.2 - Relevant identified uses.

## **Section 8 - Exposure Controls/Personal Protection**

### 8.1 Control parameters

|   |        |                 | Exposure Limit | s/Guidelines   |                      |                     |  |
|---|--------|-----------------|----------------|--|----------------------|---------------------|--|
|   | Result | ACGIH           | Canada Ontario | Ireland  | Israel               | Portugal            |  |
| Dimethyl Sulfide<br>(75-18-3) TWAs 10 ppr |        | 10 ppm TWA      | 10 ppm TWA     | 20 ppm TWA   | 10 ppm TWA           | 10 ppm TWA [VLE-MP] |  |
| Exposure Limits/Guidelines (Con't.)       |        |                 |                |  |                      |                     |  |
|   |        | Result          | Spain          |  | Sweden               |                     |  |
| Dimethyl Sulfide<br>(75-18-3)             |        | 10 ppm TWA [VLA | A-ED]          | 1 ppm LLV (appli<br>the sum total of the<br>concentrations of<br>Dimethyl disulfide<br>Dimethyl sulfide at<br>Methyl mercaptal | he<br>f<br>e,<br>and |                     |  |

#### **Exposure Control Notations**

#### **Portugal**

•Ethylene (74-85-1): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen)

#### Ireland

•Ethylene (74-85-1): Simple Asphyxiants: (Asphyxiant)

#### **Germany TRGS**

•Ethylene (74-85-1): Carcinogens: (Based on current data, this substance cannot be classified in categories 1-3) | Developmental Toxins: (Based on current data, this substance cannot be classified in categories 1-3) | Reproductive Toxins: (Based on current data, this substance cannot be classified in categories 1-3) | Germ Cell Mutagens: (Category 3)

#### **Germany DFG**

•Ethylene (74-85-1): Carcinogens: (Category 3B (could be carcinogenic for man))

### 8.2 Exposure controls

## **Engineering Measures/Controls**

 Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof - electrical, ventilating and/or lighting equipment.

#### **Personal Protective Equipment**

Respiratory

In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face

Wear safety glasses.

Skin/Body

Wear leather gloves when handling cylinders.

## **Environmental Exposure Controls**

 Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

#### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

LLV = Limit Level Value is the exposure limit for 8-hour work day

STEL = Short Term Exposure Limits are based on 15-minute exposures

## **Section 9 - Physical and Chemical Properties**

## 9.1 Information on Physical and Chemical Properties

| Material Description                |                                   |                        |                                   |
|-------------------------------------|-----------------------------------|------------------------|-----------------------------------|
| Physical Form                       | Gas                               | Appearance/Description | Colorless gas with sweet odor.    |
| Color                               | Colorless                         | Odor                   | Sweet odor.                       |
| Odor Threshold                      | Data lacking                      |                        |                                   |
| General Properties                  |                                   |                        |                                   |
| Boiling Point                       | -104 C(-155.2 F)<br>Ethylene      | Melting Point          | -169 C(-272.2 F)<br>Ethylene      |
| Decomposition Temperature           | Data lacking                      | рН                     | Data lacking                      |
| Specific Gravity/Relative Density   | Data lacking                      | Water Solubility       | 131 mg/L @ 20 C(68 F)<br>Ethylene |
| Viscosity                           | Data lacking                      | Explosive Properties   | Not explosive.                    |
| Oxidizing Properties:               | Not an oxidizer.                  |                        |                                   |
| Volatility                          | -                                 | -                      |                                   |
| Vapor Pressure                      | 42700 hPa @ 0 C(32 F)<br>Ethylene | Vapor Density          | 0.98 Air=1<br>Ethylene            |
| Evaporation Rate                    | Data lacking                      |                        |                                   |
| Flammability                        |                                   | -                      | -                                 |
| Flash Point                         | -136 C(-212.8 F)<br>Ethylene      | UEL                    | Data lacking                      |
| LEL                                 | Data lacking                      | Autoignition           | 450 C(842 F)<br>Ethylene          |
| Flammability (solid, gas)           | Flammable gas.                    |                        |                                   |
| Environmental                       |                                   |                        |                                   |
| Octanol/Water Partition coefficient | 0.053 Kow<br>Ethylene             |                        |                                   |

#### 9.2 Other Information

No additional physical and chemical parameters noted.

## **Section 10: Stability and Reactivity**

#### 10.1 Reactivity

Preparation Date: 05/September/2014 Revision Date: 05/September/2014 No dangerous reaction known under conditions of normal use.

## 10.2 Chemical stability

Stable under normal temperatures and pressures.

## 10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4 Conditions to avoid

Excess heat, sparks, open flame.

## 10.5 Incompatible materials

 Strong oxidizers. Reacts violently with AlCl3, O3, CCl4, benzoyl peroxide, bromotrichloromethane, and nitromethane with AlCl3.

## 10.6 Hazardous decomposition products

Toxic carbon monoxide. Sulfur oxides.

## **Section 11 - Toxicological Information**

## 11.1 Information on toxicological effects

| -  | Components  |  |  |  |  |  |
|--|-------------|--|--|--|--|--|
| Dimethyl Sulfide<br>(0.0001% TO 0.0002%) | 75-<br>18-3 | Acute Toxicity: Ingestion/Oral-Rat LD50 • 3300 mg/kg; Behavioral:General anesthetic; Behavioral:Changes in motor activity (specific assay); Behavioral:Irritability; Skin-Rabbit LD50 • >5 g/kg; Irritation: Eye-Rabbit • 250 µg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation |  |  |  |  |
| Ethylene (99.9998% TO 99.9999%)          |             | Acute Toxicity: Ingestion/Oral-Rat LD50 • 3300 mg/kg; Skin-Rabbit LD50 • >5 g/kg; Irritation: Eye-Rabbit • 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation   |  |  |  |  |

| GHS Properties            | Classification   |
|---------------------------|--|
| Acute toxicity            | EU/CLP   Classification criteria not met  OSHA HCS 2012   Classification criteria not met  |
| Aspiration Hazard         | EU/CLP   Classification criteria not met  OSHA HCS 2012   Classification criteria not met  |
| Carcinogenicity           | EU/CLP   Classification criteria not met  OSHA HCS 2012   Classification criteria not met  |
| Germ Cell Mutagenicity    | EU/CLP   Classification criteria not met  OSHA HCS 2012   Classification criteria not met  |
| Skin corrosion/Irritation | EU/CLP   Classification criteria not met  OSHA HCS 2012   Classification criteria not met  |
| Skin sensitization        | EU/CLP   Classification criteria not met  OSHA HCS 2012   Classification criteria not met  |
| STOT-RE                   | EU/CLP   Classification criteria not met  OSHA HCS 2012   Classification criteria not met  |
| STOT-SE                   | EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects |
| Toxicity for Reproduction | EU/CLP ◆ Classification criteria not met OSHA HCS 2012 ◆ Classification criteria not met   |

| Respiratory sensitization     | EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met |
|-------------------------------|--|
| Serious eye damage/Irritation | EU/CLP   Classification criteria not met OSHA HCS 2012   Eye Irritation 2A               |

# Potential Health Effects Inhalation

#### Acute (Immediate)

• This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. If this material is released in a small, poorly ventilated area (i.e. an enclosed or confined space), an oxygen-deficient environment may occur. Individuals breathing such an atmosphere may experience symptoms which include headaches, ringing in ears, dizziness, drowsiness, unconsciousness, nausea, vomiting, and depression of all the senses. Under some circumstances of over-exposure, death may occur. The following effects associated with decreased levels of oxygen: increase in breathing and pulse rate, emotional upset, abnormal fatigue, nausea, vomiting, collapse, loss of consciousness, convulsive movements, respiratory collapse and death. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

Chronic (Delayed)

No data available

Skin

Acute (Immediate)

Under normal conditions of use, no health effects are expected.

**Chronic (Delayed)** 

No data available

Eye

Acute (Immediate)

Causes serious eye irritation.

**Chronic (Delayed)** 

No data available

Ingestion

Acute (Immediate)

•

**Chronic (Delayed)** 

Ingestion is not anticipated to be a likely route of exposure to this product.

No data available

Key to abbreviations

## LD = Lethal Dose

## **Section 12 - Ecological Information**

## 12.1 Toxicity

Material data lacking.

## 12.2 Persistence and degradability

Material data lacking.

## 12.3 Bioaccumulative potential

Material data lacking.

## 12.4 Mobility in Soil

Material data lacking.

#### 12.5 Results of PBT and vPvB assessment

No PBT and vPvB assessment has been conducted.

#### 12.6 Other adverse effects

No studies have been found.

## **Section 13 - Disposal Considerations**

#### 13.1 Waste treatment methods

**Product waste** 

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Packaging waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## **Section 14 - Transport Information**

|           | 14.1 UN<br>number | 14.2 UN proper shipping name                    | 14.3 Transport<br>hazard class(es) | 14.4 Packing<br>group | 14.5 Environmental<br>hazards |
|-----------|-------------------|---|------------------------------------|-----------------------|-------------------------------|
| DOT       | UN1954            | Compressed gas, flammable, n.o.s. (Ethylene)    | 2.1                                | NDA                   | NDA                           |
| TDG       | UN1954            | COMPRESSED GAS, FLAMMABLE,<br>N.O.S. (Ethylene) | 2.1                                | NDA                   | NDA                           |
| IMO/IMDG  | UN1954            | COMPRESSED GAS, FLAMMABLE,<br>N.O.S. (Ethylene) | 2.1                                | NDA                   | NDA                           |
| IATA/ICAO | UN1954            | Compressed gas, flammable, n.o.s. (Ethylene)    | 2.1                                | NDA                   | NDA                           |

## 14.6 Special precautions for user

- Cylinders should be transported in a secure position, in a well-ventilated vehicle. The
  transportation of compressed gas cylinders in automobiles or in closed-body vehicles
  can present serious safety hazards. If transporting these cylinders in vehicles, ensure
  these cylinders are not exposed to extremely high temperatures (as may occur in an
  enclosed vehicle on a hot day). Additionally, the vehicle should be well-ventilated
  during transportation.
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- Not relevant.

## **Section 15 - Regulatory Information**

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

**SARA Hazard Classifications** • Acute, Fire, Pressure(Sudden Release of)

| State Right To Know                  |     |    |    |    |  |  |
|--------------------------------------|-----|----|----|----|--|--|
| Component                            | CAS | MA | NJ | PA |  |  |
| Dimethyl Sulfide 75-18-3 Yes Yes Yes |     |    |    |    |  |  |

| Inventory        |                    |            |               |       |     |           |           |
|------------------|--------------------|------------|---------------|-------|-----|-----------|-----------|
| Component        | CAS                | Canada DSL | Canada NDSL   | Chi   | na  | EU EINECS | EU ELNICS |
| Dimethyl Sulfide | 75-18-3            | Yes        | No            | Ye    | s   | Yes       | No        |
|                  |                    |            | Inventory (Co | n't.) |     |           |           |
| Component        | Component CAS TSCA |            |               |       |     |           |           |
| Dimethyl Sulfide |                    | 75-        | 18-3          |       | Yes |           |           |

#### Canada

| Labor Considerations of Outstanding  |         |            |
|--|---------|------------|
| Canada - WHMIS - Classifications of Substances   | 75 10 2 | P2 D2D     |
| Dimethyl Sulfide   | 75-18-3 | B2, D2B    |
| Canada - WHMIS - Ingredient Disclosure List  |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
| - Binicaryi Guinde   | 70 10 0 | Not Elsted |
| □ Environment  |         |            |
| Canada - CEPA - Priority Substances List   |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
| 2  |         |            |
| China  |         |            |
| Environment  |         |            |
| China - Ozone Depleting Substances - First Schedule                                    |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
|  |         |            |
| China - Ozone Depleting Substances - Second Schedule                                   |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
| China - Ozone Depleting Substances - Third Schedule                                    |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
| - Difficulty Suffice   | 75-10-5 | Not Listed |
| □ Other □  |         |            |
| China - Annex I & II - Controlled Chemicals Lists                                      |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
|  |         |            |
| China - Dangerous Goods List   |         |            |
| Dimethyl Sulfide   | 75-18-3 |            |
|  |         |            |
| China - Export Control List - Part I Chemicals   |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
|  |         |            |
| Europe   |         |            |
| Other  |         |            |
| EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification                           |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
| FIL - CLP (1272/2008) - Apply VI - Table 2.2 - Concentration Limits                    |         |            |
| EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits  • Dimethyl Sulfide | 75-18-3 | Not Listed |
| - Dimetryi Sullide   | 70-10-0 | NOT LISTED |
| EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling                                |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
|  |         |            |
| EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations      |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
|  |         |            |
| EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases                           |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
|  |         |            |

## Germany

| Environment                           |         |            |
|---------------------------------------|---------|------------|
| Germany - TA Luft - Types and Classes |         |            |
| Dimethyl Sulfide                      | 75-18-3 | Not Listed |

| Germany - Water Classification (VwVwS) - Annex 1  • Dimethyl Sulfide                         | 75-18-3 | Not Listed                   |
|--|---------|------------------------------|
| Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes  • Dimethyl Sulfide  | 75-18-3 | Not Listed                   |
| Germany - Water Classification (VwVwS) - Annex 3   |         | ID Number 2348, hazard class |
| Dimethyl Sulfide   | 75-18-3 | 1 - low hazard to waters     |
| Other  |         |                              |
| Germany - Specifically Regulated Chemicals in TRGS  • Dimethyl Sulfide                       | 75-18-3 | Not Listed                   |
| Portugal   |         |                              |
| Other Portugal - Prohibited Substances   |         |                              |
| Dimethyl Sulfide   | 75-18-3 | Not Listed                   |
| United Kingdom   |         |                              |
| Environment United Kingdom - Pollution Inventory - Schedule 1 - Thresholds for Releases to A | ir      |                              |
| Dimethyl Sulfide   | 75-18-3 | Not Listed                   |
| Other  |         |                              |
| United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review  • Dimethyl Sulfide | 75-18-3 | Not Listed                   |
| United Kingdom - List of Dangerous Substances in Water  • Dimethyl Sulfide                   | 75-18-3 | Not Listed                   |
| United States  |         |                              |
| Labor U.S OSHA - Process Safety Management - Highly Hazardous Chemicals                      |         |                              |
| Dimethyl Sulfide   | 75-18-3 | Not Listed                   |
| U.S OSHA - Specifically Regulated Chemicals  • Dimethyl Sulfide                              | 75-18-3 | Not Listed                   |
| Environment  |         |                              |
| U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants  • Dimethyl Sulfide                  | 75-18-3 | Not Listed                   |
| U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities  • Dimethyl Sulfide   | 75-18-3 | Not Listed                   |
| U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities  • Dimethyl Sulfide          | 75-18-3 | Not Listed                   |
| U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs  • Dimethyl Sulfide   | 75-18-3 | Not Listed                   |
|  |         |                              |

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| U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs  • Dimethyl Sulfide         | 75-18-3 | Not Listed |  |
|---|---------|------------|--|
| <ul><li>U.S CERCLA/SARA - Section 313 - Emission Reporting</li><li>Dimethyl Sulfide</li></ul> | 75-18-3 | Not Listed |  |
| U.S CERCLA/SARA - Section 313 - PBT Chemical Listing  • Dimethyl Sulfide                      | 75-18-3 | Not Listed |  |

#### **United States - California**

| nvironment<br>U.S California - Proposition 65 - Carcinogens List       |         |            |
|--|---------|------------|
| • Dimethyl Sulfide   | 75-18-3 | Not Listed |
| U.S California - Proposition 65 - Developmental Toxicity               |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
| U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL) |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
| U.S California - Proposition 65 - No Significant Risk Levels (NSRL)    |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
| U.S California - Proposition 65 - Reproductive Toxicity - Female       |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |
| U.S California - Proposition 65 - Reproductive Toxicity - Male         |         |            |
| Dimethyl Sulfide   | 75-18-3 | Not Listed |

### **United States - Pennsylvania**

| Labor U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List                  |         |            |  |
|---|---------|------------|--|
| Dimethyl Sulfide  | 75-18-3 |            |  |
| U.S Pennsylvania - RTK (Right to Know) - Special Hazardous Substances  • Dimethyl Sulfide | 75-18-3 | Not Listed |  |
| - Dimetryi Guinde   | 75-10-5 | NOT LISTED |  |

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

### **Section 16 - Other Information**

#### Relevant Phrases (code & full text)

 H225 - Highly flammable liquid and vapour H319 - Causes serious eye irritation

R11 - Highly flammable. R36 - Irritating to eyes. 05/September/2014

**Last Revision Date** 

**Preparation Date** 

Disclaimer/Statement of Liability

05/September/2014

To the best of Air Liquide'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 gas mixture 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.

**Key to abbreviations** NDA = No Data Available

Preparation Date: 05/September/2014 Revision Date: 05/September/2014