## **Safety Data Sheet**



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

1.1 Product identifier

Synonyms I Monomethylsilane; Monosilylmethane; Silylmethane

Product Code | 60061

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

Relevant identified use(s) | Semiconductor Uses

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 - CHEMTREC

Manufacturer +1 703-527-3887 - Outside United States

#### 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

**DSD/DPD** | Extremely Flammable (F+)

R12

2.2 Label Elements

**CLP** 

#### **DANGER**





Hazard statements | H220 - Extremely flammable gas

H280 - Contains gas under pressure; may explode if heated

**Precautionary statements** 

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

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

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

**Storage/Disposal** P403 - Store in a well-ventilated place.

DSD/DPD

F+

Risk phrases | R12 - Extremely flammable.

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.

May react on contact with water; releases flammable gases.

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.

May react on contact with water; releases flammable gases.

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

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

May displace oxygen and cause rapid suffocation.

**Precautionary statements** 

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

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

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

**Storage/Disposal** 1 Store in a well-ventilated place. - P403

2.3 Other hazards

OSHA HCS 2012 | May react on contact with water; releases flammable gases. 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 Dangerously reactive - F

# 2.2 Label elements WHMIS







Compressed Gas - A Flammable Gases - B1 Dangerously reactive - F

# 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).

#### 2.4 Other information



## 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 Name	Identifiers	%	Classifications According to Regulation/Directive		
Methylsilane	CAS:992-94-9 EINECS:213-598-5	0.1% TO 50%	EU DSD/DPD: Self Classified - F+, R12 EU CLP: Self Classified - Flam. Gas 1, H220; Press. Gas - Comp., H280 OSHA HCS 2012: Flam. Gas 1; Press. Gas - Comp.; Simp. Asphyx		
Hydrogen	CAS:1333-74-0 EC Number:215-605-7	Balance	EU DSD/DPD: EU CLP, Annex VI, Table 3.2: F+, R12 EU CLP: EU CLP, Annex VI, Table 3.1: Flam. Gas 1, H220; Press. Gas OSHA HCS 2012: Flam. Gas 1, Press. Gas - Comp.; Simp. Asphyx.		

#### **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.

Skin

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

Eye

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.

Indestion 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** 

Ingestion

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 overexposure 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** | Use CO2, dry chemical, or foam.

**Unsuitable Extinguishing** Media

DO NOT USE WATER AND HALOGENS

## 5.2 Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards** 

EXTREMELY FLAMMABLE

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.

Produce flammable gases on contact with water.

**Hazardous Combustion Products** 

No data available

## 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 NÓT EXTÍNGUISH A LEAKING GAS FIRE UNLESS LEAK CÁN 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; ising may occur.

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. 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.

## 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 Limits/Guidelines** | Currently there are no applicable exposure limits established for this material.

#### **Exposure Control Notations**

**Portugal** 

•Hydrogen (1333-74-0): Simple Asphyxiants: (Simple Asphyxiant)

Ireland

•Hydrogen (1333-74-0): Simple Asphyxiants: (Asphyxiant)

**Spain** 

•Hydrogen (1333-74-0): Simple Asphyxiants: (simple asphyxiant)

### 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** I Wear safety glasses.

**Skin/Body** I 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.

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

## 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Gas	Appearance/Description	Colorless gas with a mildly repulsive odor.
Color	Colorless	Odor	Mildly repulsive.
Odor Threshold	Not relevant		
General Properties		•	
Boiling Point	-252.8 C(-423.04 F) Hydrogen	Melting Point	-259.2 C(-434.56 F) Hydrogen
Decomposition Temperature	Data lacking	рН	Not relevant
Specific Gravity/Relative Density	Data lacking	Water Solubility	1.96 mg/L @ 0 C(32 F) Hydrogen
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility		•	
Vapor Pressure	79 hPa @ -259 C(-434.2 F) Hydrogen	Vapor Density	0.07 Air=1 Hydrogen
Evaporation Rate	Data lacking		
Flammability	•	•	•
Flash Point	Data lacking	UEL	Data lacking

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LEL	Data lacking	IAUTOIGNITION	570 to 585 C(1058 to 1085 F) at 1013 hPa Hydrogen
Flammability (solid, gas)	Flammable gas.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

#### 9.2 Other Information

No additional physical and chemical parameters noted.

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

### 10.1 Reactivity

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

The Hydrogen component is incompatible with strong oxidizers, halogen compounds (e.g. bromine, chlorine, fluorine), lithium, nitrogen trifluoride, oxygen difluoride. Finely divided platinum and some other metals will cause hydrogen to react explosively with oxygen in air. Methylsilane is incompatible with air, halogens and oxidizing agents, metals, acids, bases, alcohols.

## 10.6 Hazardous decomposition products

Upon ignition, thermal decomposition products can include silicon carbide (above 500° C [932°F]) silicon oxides, methane, carbon monoxide and organic acids.

## **Section 11 - Toxicological Information**

## 11.1 Information on toxicological effects

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

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STOT-RE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met	
STOT-SE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met	
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   Classification criteria not met	

# 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.

**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)** 

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

**Chronic (Delayed)** 

No data available

Ingestion

Acute (Immediate)

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

**Chronic (Delayed)** 

No data available

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

14.8 Other information

Not relevant.

Material is forbidden to be transported via Passenger Aircraft.

## 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		
Hydrogen	1333-74-0	Yes	Yes	Yes		
Methylsilane	992-94-9	No	No	No		

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS

Hydrogen	1333-74-0	Yes	No	Yes	Yes	No		
Methylsilane	992-94-9	No	Yes	Yes	Yes	No		
	Inventory (Con't.)							
Component			CAS	TSC	CA			
Hydrogen		133	33-74-0	Ye	S			
Methylsilane		992	2-94-9	Ye	S			

### Canada

Canada - WHMIS - Classifications of Substances	1222 74 0	A D4
Hydrogen	1333-74-0	A, B1
Methylsilane	992-94-9	Not Listed
Canada - WHMIS - Ingredient Disclosure List		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
ironment		
Canada - CEPA - Priority Substances List		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed

## China

ironment China - Ozone Depleting Substances - First Schedule		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
China - Ozone Depleting Substances - Second Schedule		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
China - Ozone Depleting Substances - Third Schedule		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed

ner		
China - Annex I & II - Controlled Chemicals Lists		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
China - Dangerous Goods List		
Hydrogen	1333-74-0	(compressed or refrigerate liquid)
Methylsilane	992-94-9	Not Listed
China - Export Control List - Part I Chemicals		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed

## **Europe**

Other		
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
Hydrogen	1333-74-0	F+; R12
Methylsilane	992-94-9	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
Hydrogen	1333-74-0	F+ R:12 S:(2)-9-16-33
Methylsilane	992-94-9	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparation	ons	
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases		
Hydrogen	1333-74-0	S:(2)-9-16-33
Methylsilane	992-94-9	Not Listed

## Germany

nvironment		
Germany - TA Luft - Types and Classes	4000 74 0	Mark Parkad
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
Germany - Water Classification (VwVwS) - Annex 1		
Hydrogen	1333-74-0	ID Number 741, not considered hazardous to water
Methylsilane	992-94-9	Not Listed
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
Hydrogen	1333-74-0	Not Listed
		ID Number 567, hazard class
Methylsilane	992-94-9	- low hazard to waters (footnote 13)
Germany - Water Classification (VwVwS) - Annex 3		
• Hydrogon	1333-74-0	Not Listed
Hydrogen		

## Other

Germany - Specifically Regulated Chemicals in TRGS		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed

## **Portugal**

1333-74-0	Not Listed
992-94-9	Not Listed

## **United Kingdom**

"nulus nuns aut		
Environment United Kingdom - Pollution Inventory - Schedule 1 - Thresholds for Releases to A	Air	
• Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
Other		
United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review		
• Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
United Kingdom - List of Dangerous Substances in Water		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
nited States		
_abor		
U.S OSHA - Process Safety Management - Highly Hazardous Chemicals  • Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
- Meuryionane	33 <b>∠-34-</b> 3	INUL LISTER
U.S OSHA - Specifically Regulated Chemicals	4000 = 4.0	
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
Environment		
U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed

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

Environment		
U.S California - Proposition 65 - Carcinogens List		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male		
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed

## **United States - Pennsylvania**

nbor		
U.S Pennsylvania - RTK (Right to Know) - Environ	mental Hazard List	
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed
U.S Pennsylvania - RTK (Right to Know) - Special	Hazardous Substances	
Hydrogen	1333-74-0	Not Listed
Methylsilane	992-94-9	Not Listed

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

#### Section 16 - Other Information

Last Revision Date Preparation Date <sub>I</sub> 08/December/2014

08/December/2014

Disclaimer/Statement of Liability

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

	Methylsilane	(0.1-50%),	Hydrogen	(Balance)	
--	--------------	------------	----------	-----------	--