Safety Data Sheet



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

1.1 Product identifier

• n-Butane (0.0001 - 0.06 %), Air (Balance)

Product Code • M-21111/E-2

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

Relevant identified use(s) • Calibration Gas

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 Compressed Gas - H280

DSD/DPD Not Classified - Classification criteria not met

2.2 Label Elements

CLP

WARNING



Hazard statements . H280 - Contains gas under pressure; may explode if heated

Precautionary statements

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

DSD/DPD

Risk phrases . No label element(s) required

2.3 Other Hazards

CLP

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

DSD/DPD

 According to European Directive 1999/45/EC this preparation is not considered dangerous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

Compressed Gas - H280

2.2 Label elements

OSHA HCS 2012

WARNING



Hazard statements . Contains gas under pressure; may explode if heated - H280

Precautionary statements

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

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

2.2 Label elements

WHMIS



Compressed Gas - A

2.3 Other hazards

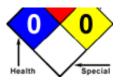
WHMIS

 In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

2.4 Other information

NFPA





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	%	LD50/LC50	Classifications According to Regulation/Directive	
Butane	CAS:106-97-8 EC Number:203- 448-7	0.0001% TO 0.06%	Inhalation-Rat LC50 • 658 g/m³ 4 Hour(s)	EU DSD/DPD: EU CLP, Annex VI, Table 3.2: F+, R12 EU CLP: Annex VI: Flam. Gas 1, H220; Press. Gas - Comp., H280 OSHA HCS 2012: Flam. Gas 1; Press. Gas - Comp.	
Air - compressed, atmospheric	CAS:132259-10-0	Balance	NDA	EU DSD/DPD: Not Classified - Criteria not met EU CLP: Self Classified: Press. Gas - Comp., H280 OSHA HCS 2012: Press. Gas - Comp.	

See Section 11 for Toxicological Information. 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.

Skin

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

Eve

 First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Get medical attention if symptoms occur. Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye.

Ingestion

 As this product is a gas, refer to the inhalation section. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

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 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 extinguishing agent suitable for type of surrounding fire.

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 Hazards

Containers may explode when heated. Ruptured cylinders may rocket.

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).

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 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

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

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: Withdraw immediately in case of rising sound from venting

safety devices or discoloration of tank. FIRE INVOLVING TANKS: ALWAYS stay away from tanks engulfed in fire.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

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

Emergency Procedures

Keep unauthorized personnel away. Keep out of low areas. Stay upwind. Do not direct water at spill or source of leak. LARGE SPILL: Consider initial downwind evacuation for at least 500 meters (1/3 mile)

6.2 Environmental precautions

No special environmental precautions necessary.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

Stop leak if you can do it without risk. Do not direct water at spill or source of leak. Use water spray to reduce vapors; do not put water directly on leak, spill area or

inside container.

If possible, turn leaking containers so that gas escapes rather than liquid.

Isolate area until gas has dispersed.

Ventilate the area.

Allow substance to evaporate.

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

 Use only with adequate ventilation. Cylinders should be firmly secured to prevent falling or being knocked-over. 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

Store in a cool, dry, well-ventilated place. 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					
	Result	ACGIH	Canada Ontario	Canada Quebec	France	Germany DFG
	TWAs	Not established	800 ppm TWA (listed under Aliphatic hydrocarbon gases)	800 ppm TWAEV; 1900 mg/m3 TWAEV	800 ppm TWA [VME]; 1900 mg/m3 TWA [VME]	Not established
	STELs	1000 ppm STEL	Not established	Not established	Not established	Not established
Butane (106-97-8)	Ceilings	Not established	Not established	Not established	Not established	4000 ppm Peak (listed under Butane); 9600 mg/m3 Peak (listed under Butane)
	MAKs	Not established	Not established	Not established	Not established	1000 ppm TWA MAK; 2400 mg/m3 TWA MAK
		Ex	cposure Limits/Gu	idelines (Con't.)		
	Result	Germany TRGS	Ireland	Israel	NIOSH	Spain
Butane (106-97-8)	TWAs	1000 ppm TWA AGW (exposure factor 4); 2400 mg/m3 TWA AGW (exposure factor 4)	1000 ppm TWA	Not established	800 ppm TWA; 1900 mg/m3 TWA	1000 ppm TWA [VLA-ED]
	STELs	Not established	Not established	1000 ppm STEL	Not established	Not established

Exposure Control Notations Italy

•Butane (106-97-8): **Carcinogens:** (Category 1 Carcinogen (containing >= 0.1% Butadiene)) | **Mutagens:** (Category 2 Mutagen (containing >= 0.1% Butadiene))

Germany DFG

•Butane (106-97-8): Pregnancy: (classification not yet possible)

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.

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

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

 $\label{eq:MAK} \mathsf{MAK} \quad = \frac{\mathsf{Maximale} \; \mathsf{Arbeitsplatz} \; \mathsf{Konzentration} \; \mathsf{is} \; \mathsf{the} \; \mathsf{maximum} \; \mathsf{permissible}}{\mathsf{concentration}}$

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

NIOSH = National Institute of Occupational Safety and Health

TWAEV = Time-Weighted Average Exposure Value

OSHA = Occupational Safety and Health Administration

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Gas	Appearance/Description	Colorless gas with no odor.
Color	Colorless	Odor	Odorless
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	рН	Not relevant
Specific Gravity/Relative Density	Data lacking	Water Solubility	18.68 cm3/l @ 20 C
Viscosity	Data lacking	Explosive Properties	Not explosive.
Oxidizing Properties:	Not an oxidizer.		
Volatility	-	-	-
Vapor Pressure	Data lacking	Vapor Density	1.01 Air=1
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Not flammable.		
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.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

Section 11 - Toxicological Information

11.1 Information on toxicological effects

		Components
Butane (0.0001% TO 0.06%)	106-97-8	Acute Toxicity: Inhalation-Rat LC50 • 658 g/m³ 4 Hour(s)

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 ◆ 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
Route(s) of entry/exposure Potential Health Effects	 Inhalation, Sk 	xin, Eye
Inhalation Acute (Immediate) Chronic (Delayed)	Under normalNo data availa	conditions of use, no health effects are expected.
Skin Acute (Immediate)	Under normal	conditions of use, no health effects are expected.
Chronic (Delayed) Eye Acute (Immediate)	No data availaUnder normal	conditions of use, no health effects are expected.
Chronic (Delayed) Ingestion	 No data availa 	able
Acute (Immediate) Chronic (Delayed)	Ingestion is nNo data availa	ot anticipated to be a likely route of exposure to this product.
Key to abbreviations		

Section 12 - Ecological Information

12.1 Toxicity

LC = Lethal Concentration

This gas mixture does not present a hazard of toxicity to the environment.

12.2 Persistence and degradability

Not relevant.

12.3 Bioaccumulative potential

Not relevant.

12.4 Mobility in Soil

Not relevant.

12.5 Results of PBT and vPvB assessment

No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

No adverse ecological effects are expected.

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	UN1956	Compressed gas, n.o.s. (Air)	2.2	NDA	NDA
TDG	UN1956	COMPRESSED GAS, N.O.S. (Air)	2.2	NDA	NDA
IMO/IMDG	UN1956	COMPRESSED GAS, N.O.S. (Air)	2.2	NDA	NDA
IATA/ICAO	UN1956	Compressed gas, n.o.s (Air)	2.2	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 • Pressure(Sudden Release of)

		State Righ	t To Know	
Component	CAS	MA	NJ	PA
Air - compressed, atmospheric	132259-10- 0	No	No	No
Butane	106-97-8	Yes	Yes	Yes

			Inventory			
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Air - compressed, atmospheric	132259-10- 0	No	No	Yes	No	No
Butane	106-97-8	Yes	No	Yes	Yes	No
			Inventory (Cor	n't.)		
Component			CAS		TSCA	
Air - compressed, atmospheric		132	2259-10-0		No	
Butane		106	6-97-8		Yes	

Canada

Canada - WHMIS - Classifications of Substances

• Air - compressed, atmospheric

132259-10-0

• Butane

106-97-8 A, B1

Canada - WHMIS - Ingredient Disclosure List Air - compressed, atmospheric Butane Environment Canada - 2004 NPRI (National Pollutant Release Inventory) Air - compressed, atmospheric Butane Canada - 2005 NPRI (National Pollutant Release Inventory) Air - compressed, atmospheric Butane	132259-10-0 106-97-8 132259-10-0 106-97-8	Not Listed 1 % Not Listed Not Listed
Environment Canada - 2004 NPRI (National Pollutant Release Inventory) Air - compressed, atmospheric Butane Canada - 2005 NPRI (National Pollutant Release Inventory) Air - compressed, atmospheric Butane	132259-10-0 106-97-8	Not Listed
Canada - 2004 NPRI (National Pollutant Release Inventory) • Air - compressed, atmospheric • Butane Canada - 2005 NPRI (National Pollutant Release Inventory) • Air - compressed, atmospheric • Butane	106-97-8	
 Air - compressed, atmospheric Butane Canada - 2005 NPRI (National Pollutant Release Inventory) Air - compressed, atmospheric Butane 	106-97-8	
 Butane Canada - 2005 NPRI (National Pollutant Release Inventory) Air - compressed, atmospheric Butane 	106-97-8	
Canada - 2005 NPRI (National Pollutant Release Inventory) • Air - compressed, atmospheric • Butane		Not Listed
Air - compressed, atmosphericButane	400000 40 0	
Butane		
	132259-10-0	Not Listed
	106-97-8	Not Listed
Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
Canada - CEPA - Priority Substances List		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
Canada - DWQ (Drinking Water Quality) - IMACs		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
Other Canada Accelerated Baduction/Elimination of Taylog (ABET)		
Canada - Accelerated Reduction/Elimination of Toxics (ARET) • Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
• Butane	100-97-8	Not Listed
anada New Brunswick		
Environment Canada - New Brunswick - Ozone Depleting Substances - Schedule A		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
• Dutane	100-97-0	Not Listed
Canada - New Brunswick - Ozone Depleting Substances - Schedule B		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
hina		
Environment		
China - Ozone Depleting Substances - First Schedule		
Air - compressed, atmospheric	132259-10-0	Not Listed
	106-97-8	Not Listed
Butane		
China - Ozone Depleting Substances - Second Schedule		
	132259-10-0	Not Listed

• Air - compressed, atmospheric

China - Ozone Depleting Substances - Third Schedule

132259-10-0 Not Listed

Butane	106-97-8	Not Listed
Other		
China - Annex I & II - Controlled Chemicals Lists		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
China - Dangerous Goods List		
Air - compressed, atmospheric	132259-10-0	(compressed or refrigerate liquid)
Butane	106-97-8	
China - Export Control List - Part I Chemicals		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed

Europe

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	F+; R12
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	F+ R:12 S:(2)-9-16
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances a	nd Preparations	
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	С
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	S:(2)-9-16

Germany

Environment Germany - TA Luft - Types and Classes		
Air - compressed, atmospheric Butane	132259-10-0 106-97-8	Not Listed Not Listed
Air - compressed, atmospheric	132259-10-0	Not Listed
		ID Number 561, not considered
Butane	106-97-8	hazardous to water (1,3-Butadiene <0.1%)
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed

Germany - Water Classification (VwVwS) - Annex 3 • Air - compressed, atmospheric • Butane Other Germany - Specifically Regulated Chemicals in TRGS	132259-10-0 106-97-8	Not Listed Not Listed
Air - compressed, atmospheric Butane Other Germany - Specifically Regulated Chemicals in TRGS		
Butane Other Germany - Specifically Regulated Chemicals in TRGS		
Other Germany - Specifically Regulated Chemicals in TRGS	106-97-8	Not Listed
Germany - Specifically Regulated Chemicals in TRGS		
Germany - Specifically Regulated Chemicals in TRGS		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
Portugal		
Other		
Portugal - Prohibited Substances		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
Inited Kingdom		
Environment	- A!-	
United Kingdom - Pollution Inventory - Schedule 1 - Thresholds for Releases to		N. alexant
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
United Kingdom - Substances Contained in Dangerous Substances or Preparat	tions	
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
Other		
United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
United Kingdom - List of Dangerous Substances in Water		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
Inited States		
Labor U.S OSHA - Process Safety Management - Highly Hazardous Chemicals		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
U.S OSHA - Specifically Regulated Chemicals	1005=- 1	
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
Environment		
Environment U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
	132259-10-0	Not Listed

Preparation Date: 07/October/2014 Revision Date: 07/October/2014

• Butane

• Air - compressed, atmospheric

Not Listed

Not Listed

132259-10-0

106-97-8

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

 U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Air - compressed, atmospheric Butane 	132259-10-0 106-97-8	Not Listed Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
 U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs Air - compressed, atmospheric 	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed

United States - California

vironment U.S California - Proposition 65 - Carcinogens List		
Air - compressed, atmospheric	132259-10-0	Not Listed
• Butane	106-97-8	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
Air - compressed, atmospheric	132259-10-0	Not Listed
• Butane	106-97-8	Not Listed
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
Air - compressed, atmospheric	132259-10-0	Not Listed
• Butane	106-97-8	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male		
Air - compressed, atmospheric	132259-10-0	Not Listed
• Butane	106-97-8	Not Listed

United States - Pennsylvania

Labor U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List		
Air - compressed, atmospheric	132259-10-0	Not Listed
Butane	106-97-8	Not Listed
U.S Pennsylvania - RTK (Right to Know) - Special Hazardous Substances		

• Air - compressed, atmospheric

Butane

132259-10-0 No 106-97-8 No

Not Listed Not Listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

 H220 - Extremely flammable gas R12 - Extremely flammable.

Last Revision Date Preparation Date • 07/October/2014

Disclaimer/Statement of Liability

- 07/October/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