

Safety Data Sheet 50233

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

Date of issue: 10/02/2014 Revision date: 10/02/2014 Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Product name : C1 - C5 (%) in Nitrogen Balance

Product code : StG 4.02.CTA.1310

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

Calgaz, division of Air Liquide 821 Chesapeake Drive Cambridge, 21613 - USA

T 1-410-228-6400 - F 1-410-228-4251 info@Calgaz.com - www.Calgaz.com

1.4. Emergency telephone number

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

Internationally: 1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Gas 1 H220 Compressed gas H280

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)





GHS02 GHS04

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H220 - Extremely flammable gas

H280 - Contains gas under pressure; may explode if heated

Precautionary statements (GHS-US) : 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

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

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

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

P313 - Get medical advice/attention

CGA-PG05 - Use a back flow preventive device in the piping CGA-PG21 - Open valve slowly

CGA-PG06 - Close valve after each use and when empty CGA-PG10 - Use only with equipment rated for cylinder pressure

CGA-PG14 - Approach suspected leak area with caution

CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52°C (125°F)

P261 - Avoid breathing gas

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

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SECTION 3: Composition/information on ingredients

Substance

Not applicable

3.2. **Mixture**

Name	Product identifier	%	Classification (GHS-US)
Nitrogen	(CAS No) 7727-37-9	83.6	Compressed gas, H280
Methane	(CAS No) 74-82-8	9	Flam. Gas 1, H220 Compressed gas, H280
Ethane	(CAS No) 74-84-0	1.5	Flam. Gas 1, H220 Compressed gas, H280
Propane	(CAS No) 74-98-6	1.5	Flam. Gas 1, H220 Liquefied gas, H280
Isobutane	(CAS No) 75-28-5	1.5	Liquefied gas, H280
Butane	(CAS No) 106-97-8	1.5	Liquefied gas, H280
Pentane	(CAS No) 109-66-0	0.7	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304
Isopentane	(CAS No) 78-78-4	0.7	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

SECTION 4: First aid measures

Description of first aid measures

First-aid measures after inhalation Remove to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell,

seek medical advice.

First-aid measures after skin contact Adverse effects not expected from this product. First-aid measures after eye contact Adverse effects not expected from this product.

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 : Adverse effects not expected from this product. Symptoms/injuries after inhalation May displace oxygen and cause rapid suffocation. Symptoms/injuries after skin contact Adverse effects not expected from this product. Symptoms/injuries after eye contact Adverse effects not expected from this product.

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

Symptoms/injuries upon intravenous : Not known.

administration

: Adverse effects not expected from this product. Chronic symptoms

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

Extinguishing media

: Dry chemical, carbon dioxide, water spray, foam, fog. Suitable extinguishing media

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

Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable gas.

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.

Standard protective clothing and equipment (e.g., Self Contained Breathing Apparatus) for fire Protection during firefighting

fighters. Do not enter fire area without proper protective equipment, including respiratory

protection.

Specific methods Exposure to fire may cause containers to rupture/explode.

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

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

Safe handling of the gas receptacle

Protect cylinders from physical damage; do not drag, roll, slide or drop. Do not remove or deface labels provided by the supplier for the identification of the cylinder contents.

Safe use of the product

The substance must be handled in accordance with good industrial hygiene and safety procedures. Only experienced and properly instructed persons should handle gases under pressure. Consider pressure relief device(s) in gas installations. Ensure the complete gas system was (or is regularily) checked for leaks before use. Do not smoke while handling product. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Keep away from ignition sources (including static discharges). Consider the use of only non-sparking tools. Consider the use of flash back arrestors.

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.

Incompatible products

: None known.

Incompatible materials

: Air. Oxidizing materials.

Storage area

: Store away from heat. Store in a well-ventilated place.

7.3. Specific end use(s)

Test gas/Calibration gas.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Methane (74-82-8)		
USA ACGIH	ACGIH TWA (ppm)	1000 ppm

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Ethane (74-84-0)			
USA ACGIH	ACGIH TWA (ppm)	1000 ppm	
Propane (74-98-6)			
USA ACGIH	ACGIH TWA (ppm)	1000 ppm	
USA OSHA	OSHA PEL (TWA) (mg/m³)	1800 mg/m³	
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm	
Isobutane (75-28-5)			
USA ACGIH	ACGIH STEL (ppm)	1000 ppm	
Butane (106-97-8)			
USA ACGIH	ACGIH STEL (ppm)	1000 ppm	
Isopentane (78-78-4)			
USA ACGIH	ACGIH TWA (ppm)	600 ppm	
Pentane (109-66-0)			
USA ACGIH	ACGIH TWA (ppm)	600 ppm	
USA OSHA	OSHA PEL (TWA) (mg/m³)	2950 mg/m³	
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm	

Nitrogen (7727-37-9)

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Systems under pressure should be regularly checked for leakages. Ensure exposure is below occupational exposure limits. Oxygen

detectors should be used when asphyxiating gases may be released. Consider work permit

system e.g. for maintenance activities.

Hand protection : Wear working gloves when handling gas containers. 29CFR 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 : None necessary during normal and routine operations. See sections 5 & 6.

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 : Clear, colorless gas.

Molecular mass : Not applicable for gas-mixtures.

Color : Colorless
Odor : odorless

Odor threshold : No data available

pH : Not applicable for gas-mixtures.

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

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

Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available

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Flammability (solid, gas) : Flammable

Vapor pressure : Not applicable.

Relative vapor density at 20 °C : No data available

Relative density : No data available

Relative gas density : Lighter or similar to air.

Solubility : Water: Solubility in water of component(s) of the mixture :

•: 26 mg/l •: 61 mg/l •: 75 mg/l •: 54 mg/l •: Insoluble •: 20 mg/l •: < 1 mg/l •: 48

mg/l

Log Pow : Not applicable for gas-mixtures.

Log Kow : Not applicable for gas-mixtures.

Viscosity, kinematic : Not applicable.
Viscosity, dynamic : Not applicable.
Explosive properties : No data available.

Oxidizing properties : None.

Explosive limits : No data available

9.2. Other information

Additional information : None.

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

Air. Oxidizing materials.

Methane (74-82-8)

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 : Not classified

LC50 inhalation rat (ppm)	410000 ppm/4h
ATE US (gases)	410000.0000000 ppmV/4h
Ethane (74-84-0)	
LC50 inhalation rat (mg/l)	658 mg/l/4h
LC50 inhalation rat (ppm)	410000 ppm/4h
ATE US (gases)	410000.00000000 ppmV/4h
ATE US (vapors)	658.00000000 mg/l/4h
ATE US (dust, mist)	658.00000000 mg/l/4h
Propane (74-98-6)	
LC50 inhalation rat (mg/l)	658 mg/l/4h

1 Topane (74-30-0)	
LC50 inhalation rat (mg/l)	658 mg/l/4h
LC50 inhalation rat (ppm)	410000 ppm/4h
ATE US (gases)	410000.0000000 ppmV/4h
ATE US (vapors)	658.00000000 mg/l/4h
ATE US (dust, mist)	658.00000000 mg/l/4h
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C1 - C5 (%) in Nitrogen Balance Safety Data Sheet

Isobutane (75-28-5)	
LC50 inhalation rat (mg/l)	658 mg/l/4h
LC50 inhalation rat (ppm)	313186 ppm/4h
ATE US (gases)	313186.00000000 ppmV/4h
ATE US (vapors)	658.00000000 mg/l/4h
ATE US (dust, mist)	658.00000000 mg/l/4h
Butane (106-97-8)	
LC50 inhalation rat (mg/l)	658 g/m³ (Exposure time: 4 h)
LC50 inhalation rat (ppm)	274166.5 ppm/4h
ATE US (gases)	274166.50000000 ppmV/4h
ATE US (vapors)	658.00000000 mg/l/4h
ATE US (dust, mist)	658.00000000 mg/l/4h
Pentane (109-66-0)	
LD50 dermal rabbit	3000 mg/kg
LC50 inhalation rat (mg/l)	364 g/m³ (Exposure time: 4 h)
LC50 inhalation rat (ppm)	123390 ppm/4h
ATE US (dermal)	3000.0000000 mg/kg body weight
ATE US (gases)	123390.00000000 ppmV/4h
ATE US (vapors)	364.00000000 mg/l/4h
ATE US (dust, mist)	364.00000000 mg/l/4h
	oo noocoo ng.w.m
Nitrogen (7727-37-9)	440000 /41
LC50 inhalation rat (ppm)	410000 ppm/4h
Skin corrosion/irritation	: Not classified
	pH: Not applicable for gas-mixtures.
Serious eye damage/irritation	: Not classified
	pH: Not applicable for gas-mixtures.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
product target organitomony (emigro empodato)	1101 010001100
Specific toward argan toxicity (reported	. Not along if and
Specific target organ toxicity (repeated exposure)	: Not classified
mpocuro)	No known effects from this product.
Aspiration hazard	: Not classified
	Not applicable for gases and gas-mixtures.
Symptoms/injuries after inhalation	: May displace oxygen and cause rapid suffocation.
Symptoms/injuries after skin contact	: Adverse effects not expected from this product.
Symptoms/injuries after eye contact	: Adverse effects not expected from this product.
Symptoms/injuries after ingestion	: Ingestion is not considered a potential route of exposure.
Symptoms/injuries upon intravenous idministration	: Not known.

SECTION 12: Ecological information

12.1. Toxicity

Chronic symptoms

Ecology - general : Classification criteria are not met.

Isopentane (78-78-4)	
EC50 Daphnia 1	2.3 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Pentane (109-66-0)	
LC50 fish 1	9.87 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	9.74 mg/l (Exposure time: 48 h - Species: Daphnia magna)

: Adverse effects not expected from this product.

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Pentage (100 66 0)	
Pentane (109-66-0) LC50 fish 2	11.59 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
	11.55 mg/r (Exposure time, 50 m. Openies, 1 interprates prometas)
12.2. Persistence and degradability	
C1 - C5 (%) in Nitrogen Balance	
Persistence and degradability	No data available.
Methane (74-82-8)	
Persistence and degradability	The substance is biodegradable. Unlikely to persist. No data available.
Ethane (74-84-0)	
Persistence and degradability	The substance is biodegradable. Unlikely to persist.
Propane (74-98-6)	
Persistence and degradability	The substance is biodegradable. Unlikely to persist.
	The capaciance is bloadyradable. Crimicily to person.
Isobutane (75-28-5)	The exchange is his described. The Production of the
Persistence and degradability	The substance is biodegradable. Unlikely to persist.
Butane (106-97-8)	
Persistence and degradability	No data available.
Isopentane (78-78-4)	
Persistence and degradability	No data available.
Nitrogen (7727-37-9)	
Persistence and degradability	No ecological damage caused by this product.
12.3. Bioaccumulative potential	
C1 - C5 (%) in Nitrogen Balance	Not applicable for any mixtures
Log Pow Log Kow	Not applicable for gas-mixtures. Not applicable for gas-mixtures.
Bioaccumulative potential	No data available.
·	
Methane (74-82-8)	4.00
Log Pow Log Kow	1.09 Not applicable for gas-mixtures.
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.
·	That expended to broadcamatate date to the few road from flog from Vily. Holdi to economic.
Ethane (74-84-0)	4.04
Log Pow Bioaccumulative potential	1.81 Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.
•	Not expected to bioaccumulate due to the low log Now (log Now < 4). Nelet to Section 9.
Propane (74-98-6)	
Log Pow	2.36
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.
Isobutane (75-28-5)	
BCF fish 1	1.57 - 1.97
Log Pow	2.76
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.
Butane (106-97-8)	
Log Pow	2.89
Log Kow	Not applicable for gas-mixtures.
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.
Isopentane (78-78-4)	
Log Pow	3.2 - 3.3
Log Kow	Not applicable for gas-mixtures.
Bioaccumulative potential	No data available.
Pentane (109-66-0)	

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Nitrogen (7727-37-9)	
Log Pow	Not applicable for inorganic gases.
Bioaccumulative potential	No ecological damage caused by this product.
40.4 Mahilitu in pail	

12.4. Mobility in soil	
C1 - C5 (%) in Nitrogen Balance	
Mobility in soil	No data available.
Methane (74-82-8)	
Mobility in soil	No data available.
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Ethane (74-84-0)	
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Propane (74-98-6)	
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Isobutane (75-28-5)	
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Butane (106-97-8)	
Mobility in soil	No data available.
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Isopentane (78-78-4)	
Mobility in soil	No data available.
Nitrogen (7727-37-9)	
Ecology - soil	No ecological damage caused by this product.

Other adverse effects

Effect on ozone layer : None.

Effect on the global warming : Contains greenhouse gas(es) not covered by 842/2006/EC.

SECTION 13: Disposal considerations

Waste treatment methods

Waste treatment methods

: Contact supplier if guidance is required. Do not discharge into areas where there is a risk of forming an explosive mixture with air. Waste gas should be flared through a suitable burner with flash back arrestor. 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 disposal recommendations

Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for more guidance on suitable disposal methods.

SECTION 14: Transport information

In accordance with DOT

Transport document description : UN1954 Compressed gas, flammable, n.o.s. (Methane, Nitrogen)

UN-No.(DOT) : 1954 DOT NA no. UN1954

DOT Proper Shipping Name : Compressed gas, flammable, n.o.s.

(Methane, Nitrogen)

Hazard labels (DOT) : 2.1 - Flammable gas



: G - Identifies PSN requiring a technical name **DOT Symbols**

DOT Packaging Exceptions (49 CFR 173.xxx)

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DOT Packaging Non Bulk (49 CFR 173.xxx) : 302;305 DOT Packaging Bulk (49 CFR 173.xxx) : 314;315 DOT Quantity Limitations Passenger aircraft/rail : Forbidden

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg

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

: No supplementary information available. Other information

: Avoid transport on vehicles where the load space is not separated from the driver's Special transport precautions

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 1954 COMPRESSED GAS, FLAMMABLE, N.O.S., 2.1

Class (ADR) : 2 - Gases

: 2.1 - Flammable gases Hazard labels (ADR)



Transport by sea

UN-No. (IMDG)

: COMPRESSED GAS, FLAMMABLE, N.O.S. Proper Shipping Name (IMDG)

Class (IMDG) : 2 - Gases

Air transport

UN-No.(IATA) : 1954

Proper Shipping Name (IATA) : COMPRESSED GAS, FLAMMABLE, N.O.S.

Class (IATA)

SECTION 15: Regulatory information

15.1. US Federal regulations

Pentane (109-66-0)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.	

15.2. International regulations

CANADA

Methane (74-82-8)		
Listed on the Canadian DSL (Domestic Sustances List)		
WHMIS Classification	Class A - Compressed Gas Class B Division 1 - Flammable Gas	
Ethano (74-94-0)		

Ethane (14 04 0)	
Listed on the Canadian DSL (Domestic Sustances List)	
WHMIS Classification	Class A - Compressed Gas Class B Division 1 - Flammable Gas

Propane (74-98-6)

Listed on the Canadian DSL (Domestic Sustances List)

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Propane (74-98-6)	
WHMIS Classification	Class A - Compressed Gas Class B Division 1 - Flammable Gas
Isobutane (75-28-5)	
Listed on the Canadian DSL (Domestic Sus	tances List)
WHMIS Classification	Class A - Compressed Gas Class B Division 1 - Flammable Gas
Butane (106-97-8)	
Listed on the Canadian DSL (Domestic Sus	tances List)
WHMIS Classification	Class A - Compressed Gas Class B Division 1 - Flammable Gas
Isopentane (78-78-4)	
Listed on the Canadian DSL (Domestic Sustances List)	
WHMIS Classification	Class B Division 2 - Flammable Liquid
Pentane (109-66-0)	
Listed on the Canadian DSL (Domestic Sus	tances List)
WHMIS Classification	Class B Division 2 - Flammable Liquid
Nitrogen (7727-37-9)	
Listed on the Canadian DSL (Domestic Sus	tances List)
WHMIS Classification	Class A - Compressed Gas

EU-Regulations

No additional information available

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

Not classified

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

15.2.2. National regulations

No additional information available

15.3. US State regulations

Methane (74-82-8)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Ethane (74-84-0)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Propane (74-98-6)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Isobutane (75-28-5)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Butane (106-97-8)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

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Isopentane (78-78-4)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Pentane (109-66-0)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Nitrogen (7727-37-9)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance 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.

Revision date : 10/02/2014

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: see section 16:

Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Compressed gas	Gases under pressure Compressed gas
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 1	Flammable liquids Category 1
Flam. Liq. 2	Flammable liquids Category 2
Liquefied gas	Gases under pressure Liquefied gas
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H220	Extremely flammable gas
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects

SDS US (GHS HazCom 2012)

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 gas mixture. To the best of Calgaz's knowledge, the information contained herein is reliable and accurate as of this date; however, accruacy, 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.

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