

### Safety Data Sheet 50232

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 (PPM) in Nitrogen Balance

Product code : StG 4.02.CTA.1309

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)

Compressed gas H280

#### 2.2. Label elements

#### **GHS-US** labeling

Hazard pictograms (GHS-US)



GHS04

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : 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

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)

P403 - Store in a well-ventilated place

#### 2.3. Other hazards

No additional information available

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

No data available

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Nitrogen	(CAS No) 7727-37-9	99.65	Compressed gas, H280

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Name	Product identifier	%	Classification (GHS-US)
Methane	(CAS No) 74-82-8	0.05	Flam. Gas 1, H220 Compressed gas, H280
Ethane	(CAS No) 74-84-0	0.05	Flam. Gas 1, H220 Compressed gas, H280
Propane	(CAS No) 74-98-6	0.05	Flam. Gas 1, H220 Liquefied gas, H280
Isobutane	(CAS No) 75-28-5	0.05	Liquefied gas, H280
Butane	(CAS No) 106-97-8	0.05	Liquefied gas, H280
Isopentane	(CAS No) 78-78-4	0.05	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Pentane	(CAS No) 109-66-0	0.05	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304

#### **SECTION 4: First aid measures**

#### 4.1. 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

Chronic symptoms : Adverse effects not expected from this product.

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

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

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

#### 5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use water jet.

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

Fire hazard : The product is not flammable.

Explosion hazard : Product is not explosive. Heat may build pressure, rupturing closed containers, spreading fire

and increasing risk of burns and injuries.

Reactivity : None known

#### 5.3. Advice for firefighters

Firefighting instructions : In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or

fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

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

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

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate ventilation.

#### 6.1.1. For non-emergency personnel

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

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

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.

#### 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

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.

Safe handling of the gas receptacle : Do not remove or deface labels provided by the supplier for the identification of the cylinder

contents. Protect cylinders from physical damage; do not drag, roll, slide or drop.

Safe use of the product : Only experienced and properly instructed persons should handle gases under pressure. Use

only properly specified equipment which is suitable for this product, its supply pressure and

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

temperature. Contact your gas supplier if in doubt.

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.

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 : None known.

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

ppm)	1000 ppm
	ppm)

USA ACGIH	ACGIH TWA (ppm)	1000 ppm
Propane (74-98-6)		
USA ACGIH	ACGIH TWA (ppm)	1000 ppm

1 Topane (14 00 0)		
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

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Isopentane (78-78-4)			
USA ACGIH	ACGIH TWA (ppm)	600 ppm	
Pentane (109-66-0)	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

Flammability (solid, gas) : Not applicable - not 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 •: 48 mg/l •: <1 mg/l •: 20

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 : Not applicable - not flammable.

Oxidizing properties : None.

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Explosive limits : Not applicable - not flammable

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

None known.

#### 10.4. Conditions to avoid

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

#### 10.5. Incompatible materials

None known.

#### 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

Methane (74-82-8)		
LC50 inhalation rat (ppm)	410000 ppm/4h	
ATE US (gases)	410000.00000000 ppmV/4h	
Ethano (74-94-0)		

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
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

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 0000000 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)

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Pentane (109-66-0)	
LC50 inhalation rat (ppm)	123390 ppm/4h
ATE US (dermal)	3000.00000000 mg/kg body weight
ATE US (gases)	123390.0000000 ppmV/4h
ATE US (vapors)	364.00000000 mg/l/4h
ATE US (dust, mist)	364.00000000 mg/l/4h
Nitrogen (7727-37-9)	
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
opeome target organ toxicity (emigro expectare)	. Not discounted
Specific target organ toxicity (repeated	: Not classified
exposure)	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	: Not known.
administration	
Chronic symptoms	: Adverse effects not expected from this product.
SECTION 12: Ecological information	n
12.1. Toxicity	
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)
LC50 fish 2	11.59 mg/l (Exposure time: 96 h - Species: Pimenhales promelas)

2.3 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
Pentane (109-66-0)	
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)	
11.59 mg/l (Exposure time: 96 h - Species: Pimephales promelas)	

### Persistence and degradability

C1 - C5 (PPM) 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.	
Isobutane (75-28-5)		
Persistence and degradability	The substance is biodegradable. Unlikely to persist.	

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cording to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations		
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 (PPM) in Nitrogen Balance		
Log Pow	Not applicable for gas-mixtures.	
Log Kow	Not applicable for gas-mixtures.	
Bioaccumulative potential	No data available.	
Methane (74-82-8)		
Log Pow	1.09	
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.	
Ethane (74-84-0)		
Log Pow	1.81	
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer 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.	
•	The expense to block that to the left log from (log from 1.). Here to contain a	
Isobutane (75-28-5)	4.57, 4.07	
BCF fish 1 Log Pow	1.57 - 1.97 2.76	
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.	
<b>Butane (106-97-8)</b> 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.	
•	The expense to blocked make to the left log from (log from 1.). Here to contain a	
Isopentane (78-78-4)	3.2 - 3.3	
Log Pow Log Kow	Not applicable for gas-mixtures.	
Bioaccumulative potential	No data available.	
•	110 and arangon	
Pentane (109-66-0)	3.39	
Log Pow	3.39	
Nitrogen (7727-37-9)		
Log Pow	Not applicable for inorganic gases.	
Bioaccumulative potential	No ecological damage caused by this product.	
12.4. Mobility in soil		
C1 - C5 (PPM) 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.	
	200000 C. No riight foliating, the product to drinkely to badde ground of water poliution.	

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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 any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits

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

guidance on suitable disposal methods.

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

In accordance with DOT

Transport document description : UN1956 Compressed gas, n.o.s. (Nitrogen)

UN-No.(DOT) DOT NA no. : UN1956

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

(Nitrogen)

Hazard labels (DOT) : 2.2 - Non-flammable gas



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

DOT Packaging Exceptions (49 CFR 173.xxx) : 306:307 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 : 75 kg

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg

CFR 175.75)

**DOT Vessel Stowage Location** : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

**Additional information** 

Other information : No supplementary information available.

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

> compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: -Ensure there is adequate ventilation. - Ensure that containers are firmly secured. - Ensure cylinder valve is closed and not leaking. - Ensure valve outlet cap nut or plug (where provided) is

correctly fitted. - Ensure valve protection device (where provided) is correctly fitted.

**ADR** 

Transport document description : UN 1956 COMPRESSED GAS. N.O.S., 2.2

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Class (ADR) : 2 - Gases

Hazard labels (ADR) : 2.2 - Non-flammable compressed gas



Transport by sea

UN-No. (IMDG) : 1956

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

Class (IMDG) : 2.2 - Non-flammable, non-toxic gases

Air transport

UN-No.(IATA) : 1956

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

Class (IATA) : 2

## **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

WHMIS Classification

#### 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	
Ethane (74-84-0)		
Listed on the Canadian DSL (Domestic Sustanc	es List)	
WHMIS Classification	Class A - Compressed Gas	
	Class B Division 1 - Flammable Gas	
Propane (74-98-6)		
Listed on the Canadian DSL (Domestic Sustanc	es List)	
WHMIS Classification	Class A - Compressed Gas	
	Class B Division 1 - Flammable Gas	
Isobutane (75-28-5)		
Listed on the Canadian DSL (Domestic Sustanc	es List)	
WHMIS Classification	Class A - Compressed Gas	
	Class B Division 1 - Flammable Gas	
Butane (106-97-8)		
Listed on the Canadian DSL (Domestic Sustances 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 Sustances List)		
WHMIS Classification	Class B Division 2 - Flammable Liquid	
Nitrogen (7727-37-9)		
Listed on the Canadian DSL (Domestic Sustances List)		

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Class A - Compressed Gas

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#### **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

#### 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.

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

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## Safety Data Sheet

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

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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