



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

1.1. Product identifier

Trade name : G1-CH4-2.5-A-34
SDS Nr : G1-CH4-2.5-A-34

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

Relevant identified uses : No additional information available
Uses advised against : No additional information available

1.3. Details of the supplier of the safety data sheet

Company identification : Scientific and Technical Gases Ltd
Units 1 + 2 Speedwell RoadParkhouse Industrial Estate
ST5 7RG Newcastle Under Lyme UNITED KINGDOM
+44 (0) 1782 566 897
E-Mail address (competent person) : info@stgas.eu (Not 24 Hours)

1.4. Emergency telephone number

Emergency number : Tel 24hr: +44 (0) 870 190 6777

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS04

Signal word (CLP) : Warning
Hazard statements (CLP) : H280 - Contains gas under pressure; may explode if heated
Precautionary statements (CLP) : P410+P403 - Protect from sunlight. Store in a well-ventilated place

Labelling according to Directive 67/548/EEC or 1999/45/EC

No labelling applicable

2.3. Other hazards

: No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

:Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Nitrogen	(CAS No)7727-37-9 (EC no)231-783-9 (REACH-no)*1	>= 76.6	Not classified	Compressed gas, H280
Oxygen	(CAS No)7782-44-7 (EC no)231-956-9 (EC index no)008-001-00-8 (REACH-no)*1	>= 20.9	O; R8	Ox. Gas 1, H270 Compressed gas, H280
Methane	(CAS No)74-82-8 (EC no)200-812-7 (EC index no)601-001-00-4 (REACH-no)*1	>= 2.5	F+; R12	Flam. Gas 1, H220 Compressed gas, H280

Full text of R-, H- and EUH-phrases: see section 16

Contains no other components or impurities which will influence the classification of the product.

*1: Listed in Annex IV / V REACH, exempted from registration.

*2: Registration deadline not expired.

*3: Registration not required: Substance manufactured or imported < 1t/y.

SECTION 4: First aid measures

4.1. Description of first aid measures

No additional information available

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

No additional information available

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

No additional information available

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for fire-fighters

No additional information available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

No additional information available

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

No additional information available

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Methane (74-82-8)		
Belgium	Limit value (ppm)	1000 ppm
Bulgaria	OEL TWA (mg/m ³)	500 mg/m ³
Switzerland	VME (mg/m ³)	6700 mg/m ³
Switzerland	VME (ppm)	10000 ppm
Finland	HTP-arvo (8h) (ppm)	1000 ppm
Ireland	OEL (8 hours ref) (ppm)	1000 ppm



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Romania	OEL TWA (mg/m ³)	1200 mg/m ³
Romania	OEL TWA (ppm)	1834 ppm
Romania	OEL STEL (mg/m ³)	1500 mg/m ³
Romania	OEL STEL (ppm)	2292 ppm

8.2. Exposure controls

8.2.1. Appropriate engineering controls

: No additional information available

8.2.2. Individual protection measures, e.g. personal protective equipment

: No additional information available

- Skin protection

- Hand protection : No additional information available
- Other : No additional information available

- Respiratory protection : No additional information available

Thermal hazards : No additional information available

8.2.3. Environmental exposure controls

: No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

- Physical state at 20°C / 101.3kPa : Gas
- Colour : Mixture contains one or more component(s) which have the following colour(s):
Colourless.

Odour : There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure.
Mixture contains one or more component(s) which have the following odour(s):
Odourless., No odour warning properties.

Odour threshold : No data available

pH value : No data available

Molar mass : No data available

Melting point : No data available

Boiling point : No data available

Critical temperature : No data available

Flash point : No data available

Evaporation rate (ether=1) : No data available

Flammability range [vol% in air] : No data available

Vapour pressure [20°C] : No data available

Vapour pressure [50°C] : No data available

Relative density, gas (air=1) : No data available

Relative density, liquid (water=1) : No data available

Solubility in water [mg/l] : Solubility in water of component(s) of the mixture :
• Methane: 26 mg/l • Oxygen: 39 mg/l • Nitrogen: 20 mg/l

Partition coefficient n-octanol/water [log Kow] : No data available

Auto-ignition temperature [°C] : No data available

Viscosity at 20°C : No data available

Explosive Properties : No data available

Oxidising Properties : No data available

Coefficient of oxygen equivalency (Ci) : No data available

9.2. Other information

Other data : No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

: No additional information available

10.2. Chemical stability

: No additional information available

10.3. Possibility of hazardous reactions

: No additional information available

10.4. Conditions to avoid

: No additional information available

10.5. Incompatible materials

: No additional information available

10.6. Hazardous decomposition products

: No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

12.1. Toxicity

Methane (74-82-8)	
EC50 48h - Daphnia magna	69.4 mg/l
EC50 72h Algae	19.4 mg/l
LC50-96 h - fish	147.5 mg/l

12.2. Persistence and degradability

Methane (74-82-8)	
Assessment	The substance is biodegradable. Unlikely to persist.
Oxygen (7782-44-7)	
Assessment	No ecological damage caused by this product.
Nitrogen (7727-37-9)	
Assessment	No ecological damage caused by this product.

12.3. Bioaccumulative potential

Methane (74-82-8)	
Assessment	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.
Oxygen (7782-44-7)	
Assessment	No ecological damage caused by this product.
Nitrogen (7727-37-9)	
Assessment	No ecological damage caused by this product.

12.4. Mobility in soil

Methane (74-82-8)	
Assessment	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Oxygen (7782-44-7)	
Assessment	No ecological damage caused by this product.
Nitrogen (7727-37-9)	
Assessment	No ecological damage caused by this product.

12.5. Results of PBT and vPvB assessment

Assessment :

12.6. Other adverse effects

Effect on ozone layer : No additional information available
 Effect on the global warming : Contains greenhouse gas(es) not covered by 842/2006/EC.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

List of hazardous wastes : No additional information available

13.2. Additional information

: No additional information available

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No : 1956
Labelling :



2.2 : Non-flammable, non-toxic gases

14.2. UN proper shipping name

Land transport (ADR/RID) : COMPRESSED GAS, N.O.S.

Proper Shipping Name : COMPRESSED GAS, N.O.S.

Transport document description : UN 1956 COMPRESSED GAS, N.O.S. (Methane(74-82-8) Nitrogen(7727-37-9) MIXTURE), 2.2, (E)

14.3. Transport hazard class(es)

Land transport (ADR/RID)

Class / Div. (Sub. risk(s)) : 2.2
Classification code : 1A
Hazard identification number : 20
Tunnel Restriction : E - Passage forbidden through tunnels of category E

Air transport (ICAO-TI / IATA-DGR)

Class / Div. (Sub. risk(s)) :

Sea transport (IMDG)

Class / Div. (Sub. risk(s)) :

14.4. Packing group

Land transport (ADR/RID) : Not applicable

Air transport (ICAO-TI / IATA-DGR) : Not applicable

Sea transport (IMDG) : Not applicable

14.5. Environmental hazards

Land transport (ADR/RID) : None.



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Air transport (ICAO-TI / IATA-DGR) : None.

Sea transport (IMDG) : None.

14.6. Special precautions for user

Packing Instruction(s)

Land transport (ADR/RID) :

Air transport (ICAO-TI / IATA-DGR) :

Passenger and Cargo Aircraft :

Cargo Aircraft only :

Sea transport (IMDG) :

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Sea transport (IMDG) : Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

No additional information available

National regulations

Water hazard class (WGK) : -

15.2. Chemical safety assessment

:

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Compressed gas	Gases under pressure Compressed gas
Flam. Gas 1	Flammable gases, Category 1
Ox. Gas 1	Oxidising Gases, Category 1
H220	Extremely flammable gas
H270	May cause or intensify fire; oxidizer
H280	Contains gas under pressure; may explode if heated
R12	Extremely flammable
R8	Contact with combustible material may cause fire
F+	Extremely flammable
O	Oxidising