SECTION 1: Product identifier

1.1. Product identifier

Product form : Mixture

Trade name : 338

Product code : 338

1.2. Recommended uses and restrictions

Relevant identified uses : Test gas/Calibration gas. Laboratory use.

1.3. Supplier information

CAC GAS & Instrumenation Pty Ltd
Unit 3 36 Holbeche Rd
2148 Arndell Park - AUSTRALIA
T +61 2 8676 6500
cac@cacgas.com.au - http://www.cacgas.com.au/

Emergency telephone number: 02 8676 6500

SECTION 2: Hazards identification

2.1. Classification of the hazardous chemical

Classification (GHS AU)

Press. Gas (Comp.) H280

Aquatic Acute 3 H402

2.2. Label elements

Hazard pictograms (GHS AU) :

Hazard pictograms (GHS AU) : GHS04

Signal word (GHS AU) : Warning

Hazard statements (GHS AU) : H280 - Contains gas under pressure; may explode if heated.
H402 - Harmful to aquatic life

Precautionary statements (GHS AU) : P273 - Avoid release to the environment.
P410+P403 - Protect from sunlight. Store in a well-ventilated place.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Other hazards which do not result in classification : None.

SECTION 3: Composition/information on ingredients

Name	CAS-No.	Compound type	%	Classification according to the United Nations GHS (Rev. 4, 2011)
Nitrogen	7727-37-9		≤ 68.84	Press. Gas (Comp.), H280
oxygen	7782-44-7		15 – 21	Ox. Gas 1, H270 Press. Gas (Comp.), H280
Carbon dioxide	124-38-9		0.0001 – 10	Press. Gas (Liq.), H280

Name	CAS-No.	Compound type	%	Classification according to the United Nations GHS (Rev. 4, 2011)
methane	74-82-8		0.0001 – 2.5	Flam. Gas 1, H220 Press. Gas (Comp.), H280
hydrogen sulphide	7783-06-4		0.0001 – 0.05	Flam. Gas 1, H220 Press. Gas (Liq.), H280 Acute Tox. 2 (Inhalation:gas), H330 Aquatic Acute 1, H400
carbon monoxide	630-08-0		0.0001 – 0.05	Flam. Gas 1, H220 Press. Gas (Comp.), H280 Repr. 1A, H360 Acute Tox. 3 (Inhalation:gas), H331 STOT RE 1, H372

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Perform cardiopulmonary resuscitation if breathing stopped.

First-aid measures after skin contact : Adverse effects not expected from this product. Wash skin with plenty of water.

First-aid measures after eye contact : Adverse effects not expected from this product. Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell. Ingestion is not considered a potential route of exposure.

4.2. Symptoms caused by exposure

Most important symptoms and effects, both acute and delayed : See section 11.

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

Other medical advice or treatment : None.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray or fog. Water spray. Dry powder. Foam.

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

5.2. Special hazards arising from the substance or mixture

General measures : Try to stop release. Evacuate area. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation. Act in accordance with local emergency plan. Stay upwind.

Hazardous combustion products : Incomplete combustion may form carbon monoxide. Sulphur dioxide.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Special protective equipment for fire fighters : Wear gas tight chemically protective clothing in combination with self contained breathing apparatus. Standard EN 943-2: Protective clothing against liquid and gaseous chemicals, aerosols and solid particles. Gas-tight chemical protective suits for emergency teams. Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask.

Specific methods	:	Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may cause gas receptacles to rupture. Cool endangered receptacles with water spray jet from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems. If possible, stop flow of product. Use water spray or fog to knock down fire fumes if possible. Move containers away from the fire area if this can be done without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Try to stop release. Evacuate area. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation. Act in accordance with local emergency plan. Stay upwind.

6.1.1. For non-emergency personnel

Emergency procedures	:	Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Try to stop release.

6.3. Methods and material for containment and cleaning up

For containment	:	Collect spillage.
Methods and material for containment and cleaning up	:	Ventilate area.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Safe handling of the gas receptacle	:	Refer to supplier's container handling instructions. Do not allow backfeed into the container. Protect containers from physical damage; do not drag, roll, slide or drop. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. If user experiences any difficulty operating valve discontinue use and contact supplier. Never attempt to repair or modify container valves or safety relief devices. Damaged valves should be reported immediately to the supplier. Keep container valve outlets clean and free from contaminants particularly oil and water. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnected from equipment. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to transfer gases from one cylinder/container to another. Never use direct flame or electrical heating devices to raise the pressure of a container. Do not remove or deface labels provided by the supplier for the identification of the content of the container. Suck back of water into the container must be prevented. Open valve slowly to avoid pressure shock.
Safe use of the product	:	The product 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. Avoid exposure, obtain special instructions before use. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Use only oxygen approved lubricants and oxygen approved sealings. Avoid suck back of water, acid and alkalis. Do not breathe gas. Avoid release of product into work area.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Protect from sunlight. Store in a well-ventilated place. Keep cool.
Conditions for safe storage, including any incompatibilities	:	Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them from falling over. Stored containers should be periodically checked for general condition and leakage. Keep container below 50°C in a well ventilated place. Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters - exposure standards

hydrogen sulphide (7783-06-4)		
USA - ACGIH	Local name	Hydrogen sulfide
USA - ACGIH	ACGIH OEL TWA [ppm]	1 ppm
USA - ACGIH	ACGIH OEL STEL [ppm]	5 ppm
USA - ACGIH	Remark (ACGIH)	TLV® Basis: URT irr; CNS impair
carbon monoxide (630-08-0)		
USA - ACGIH	Local name	Carbon monoxide
USA - ACGIH	ACGIH OEL TWA [ppm]	25 ppm
USA - ACGIH	Remark (ACGIH)	TLV® Basis: COHb-emia. Notations: BEI
Carbon dioxide (124-38-9)		
USA - ACGIH	Local name	Carbon dioxide
USA - ACGIH	ACGIH OEL TWA [ppm]	5000 ppm
USA - ACGIH	ACGIH OEL STEL [ppm]	30000 ppm
USA - ACGIH	Remark (ACGIH)	TLV® Basis: Asphyxia
methane (74-82-8)		
USA - ACGIH	Local name	Methane
USA - ACGIH	Remark (ACGIH)	TLV® Basis: Simple Asphyxiant
Nitrogen (7727-37-9)		
USA - ACGIH	Local name	Nitrogen
USA - ACGIH	Remark (ACGIH)	TLV® Basis: Simple Asphyxiant

Exposure limit values for the other components

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Product to be handled in a closed system and under strictly controlled conditions. Provide adequate general and local exhaust ventilation. Preferably use permanent leak-tight installations (e.g. welded pipes). Systems under pressure should be regularly checked for leakages. Ensure exposure is below occupational exposure limits (where available). Consider the use of a work permit system e.g. for maintenance activities.

8.4. Personal protective equipment

Personal protective equipment : A risk assessment should be conducted and documented in each work area to assess the risks related to the use of the product and to select the PPE that matches the relevant risk. The following recommendations should be considered: PPE compliant to the recommended EN/ISO standards should be selected.

Hand protection : Wear working gloves when handling gas containers. Standard EN 388 - Protective gloves against mechanical risk. Protective gloves

Eye protection : Safety glasses. Wear safety glasses with side shields. Standard EN 166 - Personal eye-protection - specifications

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Gas filters may be used if all surrounding conditions e.g. type and concentration of the contaminant(s) and duration of use are known. Use gas filters with full face mask, where exposure limits may be exceeded for a short-term period, e.g. connecting or disconnecting containers. Consult respiratory device supplier´s product information for the selection of the appropriate device. Gas filters do not protect against oxygen deficiency. Standard EN 14387 - Gas filter(s), combined filter(s) and standard EN136, full face masks . Keep self contained breathing apparatus readily available for emergency use. Self contained breathing apparatus is recommended, where unknown exposure may be expected, e.g. during maintenance activities on installation systems. Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask.

Thermal hazard protection : None in addition to the above sections.

Environmental exposure controls	:	Avoid release to the environment. 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. Standard EN ISO 20345 - Personal protective equipment - Safety footwear.

9.1. SECTION 9: Physical and chemical properties

Physical state	:	Gas
Appearance	:	
Molecular mass	:	Not applicable for gas mixtures.
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: Rotten eggs.
Odour threshold	:	Odour threshold is subjective and inadequate to warn of overexposure.
pH	:	Not applicable for gases and gas mixtures.
Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	Not applicable for gases and gas mixtures.
Melting point / Freezing point	:	Melting point : Not applicable for gas mixtures.
Boiling point	:	Not applicable for gas mixtures.
Flash point	:	Not applicable for gases and gas mixtures.
Auto-ignition temperature	:	Non flammable.
Decomposition temperature	:	Not applicable.
Flammability (solid, gas)	:	No data available
Vapour pressure	:	Vapour pressure : Not applicable. Vapour pressure at 50 °C : Not applicable.
Relative density	:	Relative vapour density at 20 °C : Not applicable. Relative gas density : Lighter or similar to air.
Density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	Not applicable for gas mixtures.
Viscosity	:	Viscosity, kinematic : Not applicable. Viscosity, dynamic : Not applicable.
Explosive properties	:	Not applicable.
Oxidising properties	:	Not applicable.
Explosive limits	:	Non flammable.
Minimum ignition energy	:	No data available
Fat solubility	:	No data available
Additional information	:	None.

10.1. SECTION 10: Stability and reactivity

Reactivity	:	No reactivity hazard other than the effects described in sub-sections below.No reactivity hazard other than the effects described in sub-sections below.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	None under recommended storage and handling conditions (see section 7). Avoid moisture in installation systems.
Incompatible materials	:	For additional information on compatibility refer to ISO 11114.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11.1. SECTION 11: Toxicological information

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified

Acute toxicity (inhalation) : Classification criteria are not met,Unlike simple asphyxiants, carbon dioxide has the ability to cause death even when normal oxygen levels (20-21%) are maintained. 5% CO2 has been found to act synergistically to increase the toxicity of certain other gases (CO, NO2). CO2 has been shown to enhance the production of carboxy- or met-hemoglobin by these gases possibly due to carbon dioxide's stimulatory effects on the respiratory and circulatory systems,For more information, see 'EIGA Safety Info 24: Carbon Dioxide, Physiological Hazards' at www.eiga.eu.

hydrogen sulphide (7783-06-4)	
LC50 Inhalation - Rat [ppm]	356 ppm/4h

carbon monoxide (630-08-0)	
LC50 Inhalation - Rat [ppm]	3760 ppm/1h (ADR)

Skin corrosion/irritation : No known effects from this product.
pH: Not applicable for gases and gas mixtures.

Serious eye damage/irritation : No known effects from this product.
pH: Not applicable for gases and gas mixtures.

Respiratory or skin sensitisation : No known effects from this product.

Germ cell mutagenicity : No known effects from this product.

Carcinogenicity : No known effects from this product.

Reproductive toxicity : Not classified

STOT-single exposure : No known effects from this product.

STOT-repeated exposure : Classification criteria are not met.

Aspiration hazard :

338	
Viscosity, kinematic	Not applicable.
Viscosity, dynamic	Not applicable.
Viscosity, kinematic	Not applicable.

SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

Ecology - general : Classification criteria are not met. Harmful to aquatic life. Very toxic to aquatic life.

Hazardous to the aquatic environment, short-term (acute) : Harmful to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Not classified

338	
Partition coefficient n-octanol/water (Log Kow)	Not applicable for gas mixtures.
Partition coefficient n-octanol/water (Log Pow)	Not applicable for gas mixtures.

hydrogen sulphide (7783-06-4)	
LC50 96 h - Fish [mg/l]	0.007 – 0.019 mg/l
EC50 48h - Daphnia magna [mg/l]	0.12 mg/l
EC50 72h - Algae [mg/l]	1.87 mg/l
Partition coefficient n-octanol/water (Log Pow)	Not applicable for inorganic products.

carbon monoxide (630-08-0)	
Partition coefficient n-octanol/water (Log Pow)	1.78

Carbon dioxide (124-38-9)	
Partition coefficient n-octanol/water (Log Pow)	0.83

methane (74-82-8)	
LC50 96 h - Fish [mg/l]	147.5 mg/l
EC50 48h - Daphnia magna [mg/l]	69.4 mg/l
EC50 72h - Algae [mg/l]	19.4 mg/l
Partition coefficient n-octanol/water (Log Pow)	1.09

oxygen (7782-44-7)	
Partition coefficient n-octanol/water (Log Pow)	Not applicable for inorganic products.

Nitrogen (7727-37-9)	
Partition coefficient n-octanol/water (Log Pow)	Not applicable for inorganic products.

12.2. Persistence and degradability

338	
Persistence and degradability	No data available.

hydrogen sulphide (7783-06-4)	
Persistence and degradability	Not applicable for inorganic products.

carbon monoxide (630-08-0)	
Persistence and degradability	Will not undergo hydrolysis. Not readily biodegradable.

Carbon dioxide (124-38-9)	
Persistence and degradability	No ecological damage caused by this product.

methane (74-82-8)	
Persistence and degradability	The substance is readily biodegradable. Unlikely to persist.

oxygen (7782-44-7)	
Persistence and degradability	No ecological damage caused by this product.

Nitrogen (7727-37-9)	
Persistence and degradability	No ecological damage caused by this product.

12.3. Bioaccumulative potential

338	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Partition coefficient n-octanol/water (Log Kow)	See section 12.1 on ecotoxicology
Bioaccumulative potential	No data available.

hydrogen sulphide (7783-06-4)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Bioaccumulative potential	No data available.

carbon monoxide (630-08-0)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). See section 9.

Carbon dioxide (124-38-9)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Bioaccumulative potential	No ecological damage caused by this product. Not expected to bioaccumulate due to the low log Kow (log Kow < 4). See section 9.

methane (74-82-8)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). See section 9.

oxygen (7782-44-7)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Bioaccumulative potential	No ecological damage caused by this product.

Nitrogen (7727-37-9)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Bioaccumulative potential	No ecological damage caused by this product.

12.4. Mobility in soil

338	
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution. Partition into soil is unlikely.

hydrogen sulphide (7783-06-4)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution. Partition into soil is unlikely.

carbon monoxide (630-08-0)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution. Partition into soil is unlikely.

Carbon dioxide (124-38-9)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Ecology - soil	No ecological damage caused by this product.

methane (74-82-8)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution. Partition into soil is unlikely.

oxygen (7782-44-7)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Ecology - soil	No ecological damage caused by this product.

Nitrogen (7727-37-9)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Ecology - soil	No ecological damage caused by this product.

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No known effects from this product.

Effect on the ozone layer : None.

338	
Effect on the ozone layer	None.
Fluorinated greenhouse gases	False
GWPmix comment	Contains greenhouse gas(es).

hydrogen sulphide (7783-06-4)	
Effect on the ozone layer	No effect on the ozone layer.
Effect on global warming	No known effects from this product.
Fluorinated greenhouse gases	False

carbon monoxide (630-08-0)	
Effect on the ozone layer	No effect on the ozone layer.
Effect on global warming	No known effects from this product.
Fluorinated greenhouse gases	False

Carbon dioxide (124-38-9)	
Effect on the ozone layer	No effect on the ozone layer.
Effect on global warming	When discharged in large quantities may contribute to the greenhouse effect. Contains greenhouse gas(es).
Fluorinated greenhouse gases	False
GWP 100 years	1

methane (74-82-8)	
Effect on the ozone layer	No effect on the ozone layer.
Effect on global warming	When discharged in large quantities may contribute to the greenhouse effect. Contains greenhouse gas(es).
Fluorinated greenhouse gases	False
GWP 100 years	25

oxygen (7782-44-7)	
Effect on the ozone layer	No effect on the ozone layer.
Effect on global warming	None.
Fluorinated greenhouse gases	False

Nitrogen (7727-37-9)	
Effect on the ozone layer	No effect on the ozone layer.
Effect on global warming	None.
Fluorinated greenhouse gases	False

SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Contact supplier if guidance is required. Must not be discharged to atmosphere. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. Refer to the EIGA code of practice Doc.30 "Disposal of Gases", downloadable at http://www.eiga.eu for more guidance on suitable disposal methods. Return unused product in original container to supplier.

Additional information : External treatment and disposal of waste should comply with applicable local and/or national regulations.

SECTION 14: Transport information

14.1. UN number

UN-No. (ADG) : 1956
UN-No. (IMDG) : 1956
UN-No. (IATA) : 1956

14.2. Proper Shipping Name - Addition

Proper Shipping Name (ADG) : COMPRESSED GAS, N.O.S.
Transport by air (ICAO-TI / IATA-DGR) : Compressed gas, n.o.s.
Transport by sea (IMDG) : COMPRESSED GAS, N.O.S.

14.3. Transport hazard class(es)

ADG

Transport hazard class(es) (ADG) : 2.2
Danger labels (ADG) : 2.2

IMDG

Transport hazard class(es) (IMDG) : 2.2
Danger labels (IMDG) : 2.2

IATA

Transport hazard class(es) (IATA) : 2.2
Danger labels (IATA) : 2.2

14.4. Packing group

Packing group (ADG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Marine pollutant : No

14.6. Special precautions for user

Specific storage requirement : No data available
Shock sensitivity : No data available

14.7. 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 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.

Transport by road and rail

UN-No. (ADG)	:	1956
Special provision (ADG)	:	274, 292
Limited quantities (ADG)	:	120ml
Packing instructions (ADG)	:	P200

Transport by sea

UN-No. (IMDG)	:	1956
Special provisions (IMDG)	:	274, 378
Limited quantities (IMDG)	:	120 ml
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P200
EmS-No. (Fire)	:	F-C - FIRE SCHEDULE Charlie - NON-FLAMMABLE GASES
EmS-No. (Spillage)	:	S-V - SPILLAGE SCHEDULE Victor - GASES (NON-FLAMMABLE, NON-TOXIC)
Stowage category (IMDG)	:	A

Air transport

UN-No. (IATA)	:	1956
PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Forbidden
PCA limited quantity max net quantity (IATA)	:	Forbidden
PCA packing instructions (IATA)	:	200
PCA max net quantity (IATA)	:	75kg
CAO packing instructions (IATA)	:	200
CAO max net quantity (IATA)	:	150kg
Special provisions (IATA)	:	A202
ERG code (IATA)	:	2L

14.8. Hazchem or Emergency Action Code

Hazchem Code : 2TE

SECTION 15: Regulatory information

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

No additional information available

15.2. International agreements

No additional information available

SECTION 16: Other information

Abbreviations and acronyms	:	ATE - Acute Toxicity Estimate CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 EINECS - European Inventory of Existing Commercial Chemical Substances CAS# - Chemical Abstract Service number PPE - Personal Protection Equipment LC50 - Lethal Concentration to 50 % of a test population RMM - Risk Management Measures PBT - Persistent, Bioaccumulative and Toxic vPvB - Very Persistent and Very Bioaccumulative STOT- SE : Specific Target Organ Toxicity - Single Exposure CSA - Chemical Safety Assessment EN - European Standard UN - United Nations ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road IATA - International Air Transport Association IMDG code - International Maritime Dangerous Goods RID - Regulations concerning the International Carriage of Dangerous Goods by Rail WGK - Water Hazard Class STOT - RE : Specific Target Organ Toxicity - Repeated Exposure
Revision date	:	21/12/2016
Other information	:	Classification using data from databases maintained by the European Industrial Gases Association (EIGA). Data is maintained in EIGA doc 169 : 'Classification and Labelling Guide', downloadable at : http://www.eiga.eu. Classification in accordance with calculation methods of regulation (EC) 1272/2008 CLP.

Classification:

Press. Gas (Comp.)	H280
Aquatic Acute 3	H402

Full text of H-statements:

Acute Tox. 2 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 2
Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Acute 3	Hazardous to the aquatic environment — Acute Hazard, Category 3
Flam. Gas 1	Flammable gases, Category 1
Ox. Gas 1	Oxidising Gases, Category 1
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
Repr. 1A	Reproductive toxicity, Category 1A
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H220	Extremely flammable gas.
H270	May cause or intensify fire; oxidiser.
H280	Contains gas under pressure; may explode if heated.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H402	Harmful to aquatic life

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.