

# ≤100ppm Carbon monoxide, ≤10%

Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Reference number: SDS 01396

Issue date: 11/8/2022 Revision date: 10/17/2023 Supersedes version of: 1/16/2023 Version: 3.0

## Warning



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

#### 1.1. Product identifier

SDS no : SDS 01396

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

Relevant identified uses : Industrial and professional uses. Perform risk assessment prior to use.

Uses advised against : Consumer use

Uses other than those listed above are not supported, contact your supplier for more

information on other uses.

#### 1.3. Details of the supplier of the safety data sheet

Air Liquide UK Ltd. Station Road Coleshill B46 1JY Birmingham United Kingdom

safety.aluk@airliquide.com

### 1.4. Emergency telephone number

Emergency telephone number : 01675 462695 (Available 24/7)

### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

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

Physical hazards Gases under pressure : Compressed gas H280

#### 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)

- Storage : P403 - Store in a well-ventilated place.

2.3. Other hazards

Asphyxiant in high concentrations. Not classified as PBT or vPvB.



# ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

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

3.1. Substances Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Nitrogen	CAS-No.: 7727-37-9 EC-No.: 231-783-9 EC Index-No.: REACH-no: *1	94.998	Press. Gas (Comp.), H280
Oxygen	CAS-No.: 7782-44-7 EC-No.: 231-956-9 EC Index-No.: 008-001-00-8 REACH-no: *1	≤ 10	Ox. Gas 1, H270 Press. Gas (Comp.), H280
Carbon monoxide	CAS-No.: 630-08-0 EC-No.: 211-128-3 EC Index-No.: 006-001-00-2 REACH-no: 01-2119480165-39	≤ 0.01	Flam. Gas 1B, H221 Press. Gas (Comp.), H280 Acute Tox. 3 (Inhalation:gas), H331 Repr. 1A, H360D STOT RE 1, H372

Full text of H- and EUH-statements: see section 16

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

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

#### 4.1. Description of first aid measures

- Inhalation : Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep

victim warm and rested. Call a doctor. Perform cardiopulmonary resuscitation if breathing

stopped.

Skin contact
 Eye contact
 Adverse effects not expected from this product.
 Adverse effects not expected from this product.

- Ingestion : Ingestion is not considered a potential route of exposure.

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

In high concentrations may cause asphyxiation. Symptoms may include loss of

mobility/consciousness. Victim may not be aware of asphyxiation.

See section 11.

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

None

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

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray or fog.

Product does not burn, use fire control measures appropriate for the surrounding fire.

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

Air Liquide UK Ltd. EN (English) 2/13

<sup>\*1:</sup> Listed in Annex IV / V REACH, exempted from registration.

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



# ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

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

Specific hazards : Exposure to fire may cause containers to rupture/explode. Hazardous combustion products : None that are more hazardous than the product itself.

5.3. Advice for firefighters

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.

Special protective equipment for fire fighters In confined space use self-contained breathing apparatus.

Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire

fighters.

Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full

face mask

Standard EN 469 - Protective clothing for firefighters. Standard - EN 659: Protective gloves

for firefighters.

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

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

For non-emergency personnel : Act in accordance with local emergency plan.

> Try to stop release. Evacuate area.

Ensure adequate air ventilation.

Stay upwind.

See section 8 of the SDS for more information on personal protective equipment.

: Wear self-contained breathing apparatus when entering area unless atmosphere is proved For emergency responders

Oxygen detectors should be used when asphyxiating gases may be released.

See section 5.3 of the SDS for more information.

6.2. Environmental precautions

Try to stop release.

#### 6.3. Methods and material for containment and cleaning up

Ventilate area.

### 6.4. Reference to other sections

See also sections 8 and 13.



# ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Safe use of the product

: Do not breathe gas.

Avoid release of product into atmosphere.

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.

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.

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.

### 7.2. 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

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.

#### 7.3. Specific end use(s)

None.



≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

Carbon monoxide (630-08-0)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Carbon monoxide	
IOEL TWA	23 mg/m³	
IOEL TWA [ppm]	20 ppm	
IOEL STEL	117 mg/m³	
IOEL STEL [ppm]	100 ppm	
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164	
Austria - Occupational Exposure Limits		
MAK (mg/m³)	23 mg/m³	
MAK (OEL TWA) [ppm]	20 ppm	
MAK (OEL STEL)	66 mg/m³ (4x 15(Miw) min)	
MAK (OEL STEL) [ppm]	60 ppm (4x 15(Miw) min)	
Bulgaria - Occupational Exposure Limits		
OEL TWA	23 mg/m³ За мините с подземен добив и прокарването на подземни тунели граничните стойности влизат в сила от 21 август 2023 г.	
OEL STEL	117 mg/m³ За мините с подземен добив и прокарването на подземни тунели граничните стойности влизат в сила от 21 август 2023 г.	
Croatia - Occupational Exposure Limits		
GVI (OEL TWA) [1]	23 mg/m³	
GVI (OEL TWA) [2]	20 ppm	
KGVI (OEL STEL)	117 mg/m³	
KGVI (OEL STEL) [ppm]	100 ppm	
Denmark - Occupational Exposure Limits		
OEL TWA [1]	29 mg/m³ I minedrift og tunnelbyggeri gælder frem til og med 21. august 2023 for Carbonmonoxid	
OEL TWA [2]	25 ppm I minedrift og tunnelbyggeri gælder frem til og med 21. august 2023 for Carbonmonoxid	
Hungary - Occupational Exposure Limits		
AK (OEL TWA)	33 mg/m³ A földalatti bányászat és az alagútfúrás terén	
CK (OEL STEL)	66 mg/m³ A földalatti bányászat és az alagútfúrás terén	
Romania - Occupational Exposure Limits		
OEL TWA	23 mg/m³	
OEL TWA [ppm]	20 ppm	
OEL STEL	117 mg/m³	



# ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

OEL STEL [ppm]	100 ppm
Slovakia - Occupational Exposure Limits	1 ***
	23 mg/m³
NPHV (OEL TWA) [1]	
NPHV (OEL TWA) [2]	20 ppm
NPHV (OEL STEL)	117 mg/m³
NPHV (OEL STEL) [ppm]	100 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	29 mg/m³ Para este agente existe un periodo transitorio, que terminará, a más tardar, el 21 de agosto de 2023, para los sectores de la minería subterránea y la construcción de túneles.
VLA-ED (OEL TWA) [2]	25 ppm Para este agente existe un periodo transitorio, que terminará, a más tardar, el 21 de agosto de 2023, para los sectores de la minería subterránea y la construcción de túneles.
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	25 mg/m³ När det gäller underjord- eller tunnelarbete
NGV (OEL TWA) [ppm]	20 ppm När det gäller underjord- eller tunnelarbete
KTV (OEL STEL)	117 mg/m³ När det gäller underjord- eller tunnelarbete
KTV (OEL STEL) [ppm]	100 ppm När det gäller underjord- eller tunnelarbete
United Kingdom - Occupational Exposure Limits	· S
WEL TWA (OEL TWA) [1]	35 mg/m³ Limits applicable to underground mining & tunnelling industries ONLY until 21/8/23
WEL TWA (OEL TWA) [2]	30 ppm Limits applicable to underground mining & tunnelling industries ONLY until 21/8/23
WEL STEL (OEL STEL)	232 mg/m³ Limits applicable to underground mining & tunnelling industries ONLY until 21/8/23
WEL STEL (OEL STEL) [ppm]	200 ppm Limits applicable to underground mining & tunnelling industries ONLY until 21/8/23
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	29 mg/m³ For bransjene gruvedrift under jord og tunnelvirksomhet gjelder følgende grenseverdi for karbonmonoksid frem til 21. august 2023
Grenseverdi (OEL TWA) [2]	25 ppm For bransjene gruvedrift under jord og tunnelvirksomhet gjelder følgende grenseverdi for karbonmonoksid frem til 21. august 2023
Korttidsverdi (OEL STEL) [ppm]	100 ppm For bransjene gruvedrift under jord og tunnelvirksomhet gjelder følgende grenseverdi for karbonmonoksid frem til 21. august 2023
USA - ACGIH - Occupational Exposure Limits	
Local name	Carbon monoxide
ACGIH OEL TWA [ppm]	25 ppm
Remark (ACGIH)	TLV® Basis: COHb-emia. Notations: BEI
Regulatory reference	ACGIH 2019



# ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

Carbon monoxide (630-08-0)		
DNEL: Derived no effect level (Workers)		
Acute - local effects, inhalation	117 ppm	
Acute - systemic effects, inhalation	117 mg/m³	
Long-term - local effects, inhalation	23 ppm	
Long-term - systemic effects, inhalation	23 mg/m³	

PNEC (Predicted No-Effect Concentration) : None established.

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Systems under pressure should be regularily checked for leakages.

Ensure exposure is below occupational exposure limits (where available).

Oxygen detectors should be used when asphyxiating gases may be released.

Consider the use of a work permit system e.g. for maintenance activities.

#### 8.2.2. Individual protection measures, e.g. 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.

Eye/face protection
 Wear safety glasses with side shields.

Standard EN 166 - Personal eye-protection - specifications.

Skin protection

- Hand protection : Wear working gloves when handling gas containers.

Standard EN 388 - Protective gloves against mechanical risk, performance level 1 or higher.

- Other : Wear safety shoes while handling containers.

Standard EN ISO 20345 - Personal protective equipment - Safety footwear.

• 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.

Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full

face mask.

Gas filters do not protect against oxygen deficiency.

Self contained breathing apparatus (SCBA) or positive pressure airline with mask are to be

used in oxygen-deficient atmospheres.

Standard EN 14387 - Gas filter(s), combined filter(s) and standard EN136, full face masks .

• Thermal hazards : None in addition to the above sections.

#### 8.2.3. Environmental exposure controls

None necessary.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Appearance

Physical state at 20°C / 101.3kPa
 Colour
 Colourless.
 Odourless.

Melting point / Freezing point : Not applicable for gas mixtures.



## ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

Boiling point Not applicable for gas mixtures.

It is technically not possible to determine the boiling point or range of this mixture.

Component with lowest boiling point: Nitrogen -196 °C

Flammability Non flammable. Lower explosion limit Not available Upper explosion limit Not available

Not applicable for gases and gas mixtures. Flash point

Auto-ignition temperature Non flammable. Decomposition temperature Not applicable.

Not applicable for gases and gas mixtures. рΗ

Viscosity, kinematic Not known.

Mixture is partially soluble in water Water solubility [20°C]

Partition coefficient n-octanol/water (Log Kow) : Not available. Vapour pressure [20°C] Not applicable. Vapour pressure [50°C] Not applicable. Density and/or relative density : Not applicable. : Lighter or similar to air. Relative vapour density (air=1) Particle characteristics : Not applicable.

#### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Explosive properties : Not applicable. **Explosion limits** : Non flammable. : Not applicable. Oxidising properties

9.2.2. Other safety characteristics

: Not applicable for gas mixtures. Molar mass

Evaporation rate Not applicable for gases and gas mixtures.

Other data None

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below.

Data for mixture are not available.

This mixture contains components with the following reactivity: Violently oxidises organic

material. Can form explosive mixture with air. May react violently with oxidants.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Avoid moisture in installation systems.

10.5. Incompatible materials

For additional information on compatibility refer to ISO 11114.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not

be produced.



# ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

### **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity : Classification criteria are not met.

 Carbon monoxide (630-08-0)

 LC50 Inhalation - Rat [ppm]
 3760 ppm/1h (ADR) 1300 ppm/4h (CLP)

No known effects from this product. Skin corrosion/irritation : No known effects from this product. Serious eye damage/irritation Respiratory or skin sensitisation : No known effects from this product. : No known effects from this product. Germ cell mutagenicity : No known effects from this product. Carcinogenicity : No known effects from this product. Toxic for reproduction: Fertility Classification criteria are not met. Toxic for reproduction: unborn child : No known effects from this product. STOT-single exposure Classification criteria are not met. STOT-repeated exposure

**Aspiration hazard** : Not applicable for gases and gas mixtures.

11.2. Information on other hazards

No additional information available

### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Assessment : No ecological damage caused by this product.

EC50 48h - Daphnia magna [mg/l] : No data available. EC50 72h - Algae [mg/l] : No data available. LC50 96 h - Fish [mg/l] : No data available.

Oxygen (7782-44-7)		
EC50 48h - Daphnia magna [mg/l]	No data available.	
EC50 72h - Algae [mg/l]	No data available.	
LC50 96 h - Fish [mg/l]	No data available.	

Carbon monoxide (630-08-0)		
EC50 48h - Daphnia magna [mg/l]	No data available.	
EC50 72h - Algae [mg/l]	No data available.	
LC50 96 h - Fish [mg/l]	No data available.	

Nitrogen (7727-37-9)	
EC50 48h - Daphnia magna [mg/l]	No data available.
EC50 72h - Algae [mg/l]	No data available.
LC50 96 h - Fish [mg/l]	No data available.



# ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

12.2. Persistence and degradability

Assessment : No ecological damage caused by this product.

12.3. Bioaccumulative potential

Assessment : No data available.

12.4. Mobility in soil

Assessment : No ecological damage caused by this product.

12.5. Results of PBT and vPvB assessment

Assessment : Not classified as PBT or vPvB.

12.6. Endocrine disrupting properties

Assessment :

12.7. Other adverse effects

Other adverse effects : No known effects from this product.

Effect on the ozone layer : No effect on the ozone layer.

Effect on global warming : No known effects from this product.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

May be vented to atmosphere in a well ventilated place.

Do not discharge into any place where its accumulation could be dangerous.

Return unused product in original container to supplier.

List of hazardous waste codes (from Commission

Decision 2000/532/EC as amended)

: 16 05 05 : Gases in pressure containers other than those mentioned in 16 05 04.

#### 13.2. 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 or ID number

In accordance with ADR / RID / IMDG / IATA / ADN

UN-No. : 1956

14.2. UN proper shipping name

Transport by road/rail (ADR/RID) : COMPRESSED GAS, N.O.S. (Nitrogen, Oxygen)
Transport by air (ICAO-TI / IATA-DGR) : Compressed gas, n.o.s. (Nitrogen, Oxygen)
Transport by sea (IMDG) : COMPRESSED GAS, N.O.S. (Nitrogen, Oxygen)

14.3. Transport hazard class(es)

Labelling

2.2 : Non-flammable, non-toxic gases.

Transport by road/rail (ADR/RID)

Class : 2
Classification code : 1A
Hazard identification number : 20

Tunnel Restriction : E - Passage forbidden through tunnels of category E

Air Liquide UK Ltd. EN (English) 10/13



# ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

Transport by air (ICAO-TI / IATA-DGR)

Class / Div. (Sub. risk(s)) : 2.2

Transport by sea (IMDG)

Class / Div. (Sub. risk(s)) : 2.2
Emergency Schedule (EmS) - Fire : F-C
Emergency Schedule (EmS) - Spillage : S-V

14.4. Packing group

Transport by road/rail (ADR/RID) : Not applicable.

Transport by air (ICAO-TI / IATA-DGR) : Not applicable.

Transport by sea (IMDG) : Not applicable.

14.5. Environmental hazards

Transport by road/rail (ADR/RID) : None.
Transport by air (ICAO-TI / IATA-DGR) : None.
Transport by sea (IMDG) : None.

14.6. Special precautions for user

Packing Instruction(s)

Transport by road/rail (ADR/RID) : P200.

Transport by air (ICAO-TI / IATA-DGR)

Passenger and Cargo Aircraft : 200.
Cargo Aircraft only : 200.
Transport by sea (IMDG) : P200.

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.

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

### **SECTION 15: Regulatory information**

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

#### **EU-Regulations**

Restrictions on use : None.

Contains no substance on the REACH candidate list.

Other information, restriction and prohibition regulations

: Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Seveso Directive: 2012/18/EU (Seveso III) : Not covered.

National regulations

Water hazard class (WGK) : nwg - Non-hazardous to water.

Regulatory reference : Ensure all national/local regulations are observed.

15.2. Chemical safety assessment

A CSA does not need to be carried out for this product.

Air Liquide UK Ltd. EN (English) 11/13



# ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

#### **SECTION 16: Other information**

Indication of changes

: Safety data sheet in accordance with commission regulation (EU) No 2020/878.

Section	Changed item	Change	Comments
	Supersedes version of	Modified	
	Revision date	Modified	
1.1	Name	Modified	
3	Composition/information on ingredients	Modified	

Abbreviations and acronyms

Training advice

: 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.

 ${\bf STOT} \textbf{ - RE} : \textbf{Specific Target Organ Toxicity - Repeated Exposure}.$ 

UFI: Unique Formula Identifier.

: The hazard of asphyxiation is often overlooked and must be stressed during operator

training.

For more guidance, refer to EIGA SL 01 "Dangers of Asphyxiation", downloadable at

http://www.eiga.eu..

Further 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 the procedures and calculation methods of Regulation

(EC) 1272/2008 (CLP).

Full text of H- and EUH-statements	
Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Flam. Gas 1B	Flammable gases, Category 1B
H221	Flammable gas.
H270	May cause or intensify fire; oxidiser.
H280	Contains gas under pressure; may explode if heated.
H331	Toxic if inhaled.
H360D	May damage the unborn child.

Air Liquide UK Ltd. Station Road Coleshill B46 1JY Birmingham United Kingdom EN (English)



# ≤100ppm Carbon monoxide, ≤10% Oxygen in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: SDS 01396

H372	Causes damage to organs through prolonged or repeated exposure.
Ox. Gas 1	Oxidising Gases, Category 1
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Repr. 1A	Reproductive toxicity, Category 1A
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1

### DISCLAIMER OF LIABILITY

 Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.
 Details given in this document are believed to be correct at the time of going to press.
 Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

**End of document**