

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended

# NO 275 PPM;CO2 18 %;Ar 81,9725 %

Issue Date:	16.10.2013	Version: 1.1	SDS No.: 000010022110
Revision Date:	28.08.2023		1/21
Last revised date :	06.11.2018		

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

1.1 Product identifier

**Product name:** NO 275 PPM;CO2 18 %;Ar 81,9725 %

Trade name: MISON® 18

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

**Identified uses:** Industrial and professional. Perform risk assessment prior to use.

Shielding gas in gas welding.

Consumer use.

Shielding gas in gas welding.

**Uses advised against**Uses other than those listed above are not supported. Contact supplier for

more information on uses.

1.3 Details of the supplier of the safety data sheet

Supplier

Linde Gas AS Telephone: +4723177200

Postboks 13 Nydalen

N-0409 Oslo

E-mail: sds.ren@linde.com

1.4 Emergency telephone number: +47 22 59 13 00 (24h - Giftinformasjonssentralen)

# SECTION 2: Hazards identification

# 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended.

Physical Hazards

Gases under pressure Compressed gas H280: Contains gas under pressure; may explode if

heated.



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## 2.2 Label Elements



Signal Word: Warning

Hazard Statement(s): H280: Contains gas under pressure; may explode if heated.

**Precautionary Statements** 

General None.

Prevention: None.

Response: None.

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

**Disposal** None.

# Supplemental information

EIGA-As: Asphyxiant in high concentrations.

Unknown toxicity - Health

Acute toxicity, inhalation, gas 0 %

Unknown toxicity - Environment

Acute hazards to the aquatic

100 %

environment

Chronic hazards to the aquatic

100 %

environment



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## 2.3 Other hazards

# Endocrine disrupting properties-Toxicity

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

# Endocrine disrupting properties-Ecotoxicity

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

# SECTION 3: Composition/information on ingredients

# 3.2 Mixtures

Chemical name	Chemical formula	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Nitrogen monoxide	NO	275PPM	10102-43-9	233-271-0	01- 2120766630- 54	-	#
Carbon dioxide	C02	18%	124-38-9	204-696-9	Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH), exempted from registration.	-	#
Argon	Ar	81,9725%	7440-37-1	231-147-0	Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH), exempted from	-	

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# **SAFETY DATA SHEET**

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				registration.		
The concentrations of the compo	nents in the SDS header, product	name on page one and	in section 3.2 are in	mol due to regulato	ry requirements.	

All concentrations are nominal.

<sup>#</sup> This substance has workplace exposure limit(s).
## This substance is listed as SVHC.PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.



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# Classification

Chemical name	Classificatio		Notes
Nitrogen monoxide	CLP:	Classification: Press. Gas: Compr. Gas: H280; Eye Dam.: 1: H318; Skin Corr.: 1B: H314; Acute Tox.: 1: H330;  Supplemental label information: EUH071;  Specific concentration limit: Skin corrosion Category 1B, >= 5 %; Serious eye irritation Category 2, >= 1 %; Specific target organ toxicity - single exposure Category 3, >= 0,5 %; Serious eye damage Category 1, >= 3 %; Skin irritation Category 2, >= 1 %; Acute toxicity, oral: None known.  Acute toxicity, inhalation: LC 50: 115 ppm	
		Acute toxicity, illialation: LC 50: 115 ppill  Acute toxicity, dermal: None known.	
Carbon dioxide	CLP:	Classification: Press. Gas: Liquef. Gas: H280; Supplemental label information: EIGA0357; Specific concentration limit: None known. Acute toxicity, oral: None known. Acute toxicity, inhalation: None known. Acute toxicity, dermal: None known.	
Argon	CLP:	Classification: Press. Gas: Compr. Gas: H280; Supplemental label information: EIGA0357; Specific concentration limit: None known. Acute toxicity, oral: None known. Acute toxicity, inhalation: None known.	



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Acute to.	city, dermal: None known.
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CLP: Regulation No. 1272/2008.

The full text for all H-statements is displayed in section 16.

# **SECTION 4: First aid measures**

**General:** In high concentrations may cause asphyxiation. Symptoms may include loss of

mobility/consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

4.1 Description of first aid measures

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

mobility/consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

Low concentrations of CO2 cause increased respiration and headache.

**Eye contact:** Adverse effects not expected from this product.

**Skin Contact:** 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:

Respiratory arrest.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: None.

Treatment: None.



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# SECTION 5: Firefighting measures

**General Fire Hazards:** Heat may cause the containers to explode.

5.1 Extinguishing media

**Suitable extinguishing media:** Material will not burn. In case of fire in the surroundings: use appropriate

extinguishing agent.

Unsuitable extinguishing

media:

None.

5.2 Special hazards arising from the

substance or mixture:

None.

Hazardous Combustion Products: None.

5.3 Advice for firefighters

Special fire-fighting

procedures:

In case of fire: Stop leak if safe to do so. Continue water spray from protected position until container stays cool. Use extinguishants to contain the fire. Isolate

the source of the fire or let it burn out.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Guideline: EN 469 Protective clothing for firefighters. Performance requirements for protective clothing for firefighting. EN 15090 Footwear for firefighters. EN 659 Protective gloves for firefighters. EN 443 Helmets for fire fighting in buildings and other structures. EN 137 Respiratory protective devices - Self-contained open-circuit compressed air breathing apparatus with full face mask - Requirements,

testing, marking.

# SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Evacuate area. Provide adequate ventilation. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Guideline EN 137 Respiratory protective devices - Self-contained open-circuit compressed air breathing apparatus with full face mask - Requirements, testing, marking.



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**6.2 Environmental Precautions:** Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up:

Provide adequate ventilation.

**6.4 Reference to other sections:** Refer to sections 8 and 13.

## SECTION 7: Handling and storage:

## 7.1 Precautions for safe handling:

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 temperature. Refer to supplier's handling instructions. The substance must be handled in accordance with good industrial hygiene and safety procedures. Protect containers from physical damage; do not drag, roll, slide or drop. Do not remove or deface labels provided by the supplier for the identification of the container contents. When moving containers, even for short distances, use appropriate equipment eq. trolley, hand truck, fork truck etc. Secure cylinders in an upright position at all times, close all valves when not in use. Provide adequate ventilation. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Avoid suckback of water, acid and alkalis. Keep container below 50°C in a well ventilated place. Observe all regulations and local requirements regarding storage of containers. When using do not eat, drink or smoke. Store in accordance with local/regional/national/international regulations. Never use direct flame or electrical heating devices to raise the pressure of a container. 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. Damaged valves should be reported immediately to the supplier Close container valve after each use and when empty, even if still connected to equipment. Never attempt to repair or modify container valves or safety relief devices. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnected from equipment. Keep container valve outlets clean and free from contaminates particularly oil and water. If user experiences any difficulty operating container valve discontinue use and contact supplier. Never attempt to transfer gases from one container to another. Container valve guards or caps should be in place.



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7.2 Conditions for safe storage, including any incompatibilities:

Containers should not be stored in conditions likely to encourage corrosion. Stored containers should be periodically checked for general conditions and leakage. Container valve guards or caps should be in place. Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible material.

7.3 Specific end use(s): None.

# SECTION 8: Exposure controls/personal protection

# 8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Туре	Form of exposure	Exposure Lir	nit Values	Source
Carbon dioxide	TWA		5.000 ppm	9.000 mg/m3	EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended (12 2009)
	NORMEN		5.000 ppm	9.000 mg/m3	Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in Work Environment and Infection Groups for Biological Factors, as amended (12 2014)
	TWA		5.000 ppm	9.000 mg/m3	EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended (12 2009)
Nitrogen monoxide	TWA		2 ppm	2,5 mg/m3	EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended (02 2017)
	NORMEN		2 ppm	2,5 mg/m3	Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in Work Environment and Infection Groups for Biological Factors, as amended (2018)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.



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# **Biological Limit Values**

No biological exposure limits noted for the ingredient(s).

### 8.2 Exposure controls

Appropriate engineering

controls:

Consider a work permit system e.g. for maintenance activities. Ensure adequate air ventilation. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Oxygen detectors should be used when asphyxiating gases may be released. Systems under pressure should be regularly checked for leakages. Preferably use permanent leak tight connections (eg. welded pipes). Do not eat, drink or smoke when using the product.

Individual protection measures, such as personal protective equipment

**General information:** 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. Keep self contained breathing apparatus readily available for emergency use. Personal protective equipment for the body should be selected based on the task

being performed and the risks involved.

**Eye/face protection:** Wear eye protection to EN 166 when using gases.

Guideline: EN 166 Personal Eye Protection.

Skin protection

**Hand Protection:** Guideline: EN 388 Protective gloves against mechanical risks.

Additional Information: Wear working gloves while handling containers

**Body protection:** No special precautions.

Other: Wear safety shoes while handling containers

Guideline: ISO 20345 Personal protective equipment - Safety footwear.

**Respiratory Protection:** Not required.

**Thermal hazards:** No precautionary measures are necessary.



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**Hygiene measures:** Specific risk management measures are not required beyond good industrial

hygiene and safety procedures. Do not eat, drink or smoke when using the

product.

Environmental exposure

controls:

For waste disposal, see section 13 of the SDS.

# SECTION 9: Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

Appearance

Physical state: Gas

Form: Compressed gas
Color: CO2: Colorless
Ar: Colorless
NO: Colorless

Odor: CO2: Odorless Ar: Odorless

NO: Odorless

Odor Threshold: Odor threshold is subjective and is inadequate to warn of over

exposure.

Melting Point:No data available.Boiling Point:No data available.

**Flammability:** This product is not flammable.

Upper/lower limit on flammability or explosive limits

**Explosive limit - upper:**Not applicable
Explosive limit - lower:
Not applicable

**Flash Point:** Not applicable to gases and gas mixtures.

Autoignition Temperature: Not applicable.

Decomposition Temperature: Not known.

pH: Not applicable

Viscosity

**Dynamic viscosity:**No data available.
Kinematic viscosity:
No data available.



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Solubility(ies)

Solubility in Water: No data available.
Solubility (other): No data available.

Partition coefficient (n-octanol/water): Not known.

**Dispersion Stability:**No data available.

**Vapor pressure:** No reliable data available.

Relative density: No data available.

Density: No data available.

Relative vapor density: 1,43 (calculated) 59 °F/15 °C

Particle characteristics: Not applicable

# SECTION 10: Stability and reactivity

**10.1 Reactivity:** No reactivity hazard other than the effects described in sub-section below.

**10.2 Chemical Stability:** Stable under normal conditions.

10.3 Possibility of hazardous

reactions:

None.

**10.4 Conditions to avoid:** None.

**10.5 Incompatible Materials:** No reaction with any common materials in dry or wet conditions.

10.6 Hazardous Decomposition

Products:

Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

# SECTION 11: Toxicological information

**General information:** None.

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

Acute toxicity - Oral

**Product** Based on available data, the classification criteria are not met.



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Acute toxicity - Dermal

**Product** Based on available data, the classification criteria are not met.

Acute toxicity - Inhalation

**Product** Gas: ATEmix (4 h): > 20000 ppm Based on available data, the classification

criteria are not met.

Component Information

Nitrogen monoxide LC 50 (Rat, 1 h): 115 ppm

Skin Corrosion/Irritation

**Product** Based on available data, the classification criteria are not met.

Serious Eye Damage/Eye Irritation

**Product** Based on available data, the classification criteria are not met.

Respiratory or Skin Sensitization

**Product** Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

**Product** Based on available data, the classification criteria are not met.

Carcinogenicity

**Product** Based on available data, the classification criteria are not met.

Reproductive toxicity

**Product** Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

**Product** Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

**Product** Based on available data, the classification criteria are not met.

**Aspiration Hazard** 

**Product** Not applicable to gases and gas mixtures..



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### 11.2 Information on other hazards

Endocrine disrupting properties

**Product:** The substance/mixture does not contain components considered to have

endocrine disrupting properties according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.;

Components:

Nitrogen monoxide The substance/mixture does not contain components considered to have

endocrine disrupting properties according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.;

Carbon dioxide The substance/mixture does not contain components considered to have

endocrine disrupting properties according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.;

Argon The substance/mixture does not contain components considered to have

endocrine disrupting properties according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.;

Other information

**Product:** No data available.

# SECTION 12: Ecological information

**General information**: Not applicable

12.1 Toxicity

Acute toxicity

**Product** No ecological damage caused by this product.

12.2 Persistence and Degradability

**Product** Not applicable to gases and gas mixtures..

12.3 Bioaccumulative potential

**Product** The subject product is expected to biodegrade and is not expected to persist for

long periods in an aquatic environment.



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12.4 Mobility in soil

**Product** Because of its high volatility, the product is unlikely to cause ground or water

pollution.

12.5 Results of PBT and vPvB

assessment

**Product** Not classified as PBT or vPvB.

12.6 Endocrine disrupting properties:

**Product:** The substance/mixture does not contain components considered to have

endocrine disrupting properties according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.

Components:

Nitrogen monoxide The substance/mixture does not contain components considered to have

endocrine disrupting properties according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.

Carbon dioxide The substance/mixture does not contain components considered to have

endocrine disrupting properties according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.

Argon The substance/mixture does not contain components considered to have

endocrine disrupting properties according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects:

Other hazards

**Product:** No data available.

Other effects: No ecological damage caused by this product.



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# SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**General information:** Do not discharge into any place where its accumulation could be dangerous. Vent

to atmosphere in a well ventilated place.

**Disposal methods:** Refer to the EIGA code of practice (Doc.30 "Disposal of Gases", downloadable at

http://www.eiga.org) for more guidance on suitable disposal methods. Dispose of container via supplier only. Discharge, treatment, or disposal may be subject to

national, state, or local laws.

**European Waste Codes** 

**Container:** 16 05 05: Gases in pressure containers other than those mentioned in 16 05

04

# SECTION 14: Transport information

### ADR

14.1 UN number or ID number: UN 1956

14.2 UN Proper Shipping Name: COMPRESSED GAS, N.O.S.(Argon, Nitric oxide)

14.3 Transport Hazard Class(es)

Class: 2
Label(s): 2.2
Hazard No. (ADR): 20
Tunnel restriction code: (E)

14.4 Packing Group:

Limited quantity 120,00ML Excepted quantity E1

14.5 Environmental hazards: Not applicable

14.6 Special precautions for user: –



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### RID

14.1 UN number or ID number: UN 1956

14.2 UN Proper Shipping Name COMPRESSED GAS, N.O.S.(Argon, Nitric oxide)

14.3 Transport Hazard Class(es)

Class: 2 Label(s): 2.2 14.4 Packing Group: -

Limited quantity 120,00ML

Excepted quantity E1

14.5 Environmental hazards: Not applicable

14.6 Special precautions for user:

### **IMDG**

14.1 UN number or ID number: UN 1956

14.2 UN Proper Shipping Name: COMPRESSED GAS, N.O.S.(Argon, Nitric Oxide)

14.3 Transport Hazard Class(es)

 Class:
 2.2

 Label(s):
 2.2

 EmS No.:
 F-C, S-V

14.4 Packing Group:

Limited quantity 120,00ML

Excepted quantity E1

14.5 Environmental hazards: Not applicable

14.6 Special precautions for user: –

# IATA

14.1 UN number or ID number: UN 1956

14.2 Proper Shipping Name: Compressed gas, n.o.s.(Argon, Nitric Oxide)

14.3 Transport Hazard Class(es):

Class: 2.2
Label(s): 2.2

14.4 Packing Group: Limited quantity None.
Excepted quantity E1



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14.5 Environmental hazards:

Not applicable

14.6 Special precautions for user:

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Other information

Passenger and cargo aircraft: Allowed. Cargo aircraft only: Allowed.

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

Not applicable for product as supplied.

Additional identification:

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 that they are firmly secured. Ensure that the container valve is closed and not leaking. Container valve guards or caps should be in place. Ensure adequate air ventilation.

## SECTION 15: Regulatory information

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

**EU Regulations** 

**EU. REACH Annex XIV, Substances Subject to Authorization as amended:** None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended: None present or none present in regulated quantities.



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EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I:Not applicable

# **National Regulations**

Council Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work Directive 2016/425/EEC on personal protective equipment Only products that comply with the food regulations (EC) No. 1333/2008 and (EU) No. 231/2012 and are labelled as such may

be used as food additives.

This Safety Data Sheet has been produced to comply with Regulation (EU) 2020/878.

**15.2 Chemical safety assessment:** No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

**Revision Information:** Not relevant.

Abbreviations and acronyms:

ECTLV: EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC,

2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended Norway. Regulation No. 1358 on Measures and Limit Values for Physical and

N\_TLV: Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in Work Environment and Infection Groups for Biological Factors,

as amended

ECTLV / TWA: Time Weighted Average (TWA):

N\_TLV / NORMEN: Threshold Limit Value:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization;

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# Making our world more productive



### **SAFETY DATA SHEET**

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended

# NO 275 PPM;CO2 18 %;Ar 81,9725 %

Issue Date:	16.10.2013	Version: 1.1	SDS No.: 000010022110
Revision Date:	28.08.2023		20/21
Last revised date :	06.11.2018		·

ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data:

Various sources of data have been used in the compilation of this SDS, they include but are not exclusive to:

Agency for Toxic Substances and Diseases Registry (ATSDR)

(http://www.atsdr.cdc.gov/).

European Chemical Agency: Guidance on the Compilation of Safety Data Sheets.

European Chemical Agency: Information on Registered Substances http://apps.echa.europa.eu/registered/registered-sub.aspx#search

European Industrial Gases Association (EIGA) Doc. 169 "Classification and Labelling quide", as amended.

International Programme on Chemical Safety (http://www.inchem.org/) ISO 10156:2010 Gases and gas mixtures - Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets.

Matheson Gas Data Book, 7th Edition.

National Institute for Standards and Technology (NIST) Standard Reference Database

The ESIS (European chemical Substances 5 Information System) platform of the former European Chemicals Bureau (ECB) ESIS (http://ecb.jrc.ec.europa.eu/esis/). The European Chemical Industry Council (CEFIC) ERICards.

United States of America's National Library of Medicine's toxicology data network TOXNET (http://toxnet.nlm.nih.gov/index.html)

Threshold Limit Values (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH).

Substance specific information from suppliers.

Details given in this document are believed to be correct at the time of publication.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]



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Classification according to Regulation (EC) No 1272/2008 as amended.	Classification procedure
Gases under pressure, Compressed gas	On basis of test data

## Wording of the H-statements in section 2 and 3

H270	May cause or intensify fire; oxidizer.
H280	Contains gas under pressure; may explode if heated.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.

**Training information:** Users of breathing apparatus must be trained. The hazard of asphyxiation is often

overlooked and must be stressed during operator training. Ensure operators

understand the hazards.

Classification according to Regulation (EC) No 1272/2008 as amended.

Press. Gas Compr. Gas, H280

**Other information:**Before using this product in any new process or experiment, a thorough material

compatibility and safety study should be carried out. Ensure adequate air ventilation. Ensure all national/local regulations are observed. 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.

Last revised date: 28.08.2023

**Disclaimer:** This information is provided without warranty. The information is believed to be

correct. This information should be used to make an independent determination of

the methods to safeguard workers and the environment.