

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

1/16

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1 Product identifier
Product name: Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Trade name: Gasart 10202 Lasermix® 690

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses:
Uses advised against
1.3 Details of the supplier of the safety data sheet
Supplier

 Linde Gas GmbH
 Carl-von-Linde-Platz 1
 A-4651 Stadl-Paura

Telephone: +43 50 4273

E-mail: office@at.linde-gas.com

1.4 Emergency telephone number: Emergency number Linde: + 43 50 4273 (during business hours), Poisoning Information Center: +43 1 406 43 43

SECTION 2: Hazards identification
2.1 Classification of the substance or mixture
Classification according to Directive 67/548/EEC or 1999/45/EC as amended.

Repr. 1; R61 T; R23 T; R48/23

The full text for all R-phrases is displayed in section 16.

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.
----------------------	----------------	---

Health Hazards

Toxic to reproduction	Category 1A	H360D: May damage the unborn child.
Specific Target Organ Toxicity - Repeated Exposure	Category 2	H373: May cause damage to organs through prolonged or repeated exposure.

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013
 Last revised date: 27.05.2015

Version: 1.0

SDS No.: 000010022089
 2/16

2.2 Label Elements

Contains: carbon monoxide



Signal Words: Danger

Hazard Statement(s): H280: Contains gas under pressure; may explode if heated.
 H360D: May damage the unborn child.
 H373: May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement

Prevention: P202: Do not handle until all safety precautions have been read and understood.
 P260: Do not breathe gas/vapors.

Response: P308+P313: IF exposed or concerned: Get medical advice/attention.

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

Disposal: None.

Supplemental label information

Restricted to professional users.

2.3 Other hazards: None.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical name	Chemical formula	Concentration	CAS-No.	EC No.	REACH Registration No.	Notes
Carbon dioxide	CO ₂	4%	124-38-9	204-696-9	Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH), exempted from registration.	#
carbon monoxide	CO	6%	630-08-0	211-128-3	01-2119480165-39	#
Helium	He	65%	7440-59-7	231-168-5	Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH), exempted from registration.	

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

3/16

Xenon	Xe	3%	7440-63-3	231-172-7	Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH), exempted from registration.
Nitrogen	N2	19%	7727-37-9	231-783-9	Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH), exempted from registration.
Oxygen	O2	3%	7782-44-7	231-956-9	Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH), exempted from registration.

The concentrations of the components in the SDS header, product name on page one and in section 3.2 are in mol due to regulatory requirements. All concentrations are nominal.

This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification

Chemical name	Classification		Notes
Carbon dioxide	DSD:	none	
	CLP:	Press. Gas Liquef. Gas;H280	
carbon monoxide	DSD:	F+; R12 Repr. 1; R61 T; R23, R48/23	
	CLP:	Flam. Gas 1;H220, Press. Gas Compr. Gas;H280, Repr. 1A;H360D, Acute Tox. 3;H331, STOT RE 1;H372	
Helium	DSD:	none	
	CLP:	Press. Gas Compr. Gas;H280	
Xenon	DSD:	none	
	CLP:	Press. Gas Liquef. Gas;H280	
Nitrogen	DSD:	none	
	CLP:	Press. Gas Compr. Gas;H280	
Oxygen	DSD:	O; R8	
	CLP:	Oxid. Gas 1;H270, Press. Gas Compr. Gas;H280	

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

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

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

4/16

SECTION 4: First aid measures

General: 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

Inhalation: Low concentrations of CO2 cause increased respiration and headache. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

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: Danger of serious damage to health by prolonged exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: Danger of serious damage to health by prolonged exposure.

Treatment: Get immediate medical advice/attention.

SECTION 5: Firefighting measures

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

5.1 Extinguishing media

Suitable extinguishing media: Use water spray to reduce vapors or divert vapor cloud drift. Water. Dry powder. Foam. Carbon Dioxide.

Unsuitable extinguishing media: None.

5.2 Special hazards arising from the substance or mixture: No data available.

5.3 Advice for firefighters

Special fire fighting procedures: In case of fire: Stop leak if safe to do so. Keep run-off water out of sewers and water sources. Dike for water control. 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.

SAFETY DATA SHEET**Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %**

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

5/16

**Special protective equipment
for fire-fighters:**

Gas tight chemically protective clothing (Type 1) in combination with self contained breathing apparatus.
Guideline: EN 943-2 Protective clothing against liquid and gaseous chemicals, aerosols and solid particles. Performance requirements for gas-tight (Type 1) chemical protective suits for emergency teams (ET)

SECTION 6: Accidental release measures**6.1 Personal precautions,
protective equipment and
emergency procedures:**

Evacuate area. Provide adequate ventilation. Monitor the concentration of the released product. 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. EN 137 Respiratory protective devices - Self-contained open-circuit compressed air breathing apparatus with full face mask - Requirements, testing, marking.

6.2 Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Reduce vapour with fog or fine water spray. Keep run-off water out of sewers and water sources. Dike for water control.

**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.

SAFETY DATA SHEET**Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %**

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

6/16

SECTION 7: Handling and storage:**7.1 Precautions for safe handling:**

Only experienced and properly instructed persons should handle gases under pressure. Avoid exposure - obtain special instructions before use. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Installation of a cross purge assembly between the container and the regulator is recommended. Excess pressure must be vented through an appropriate scrubber system. 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 eg. 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 contaminants 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.

7.2 Conditions for safe storage, including any incompatibilities:

Containers should not be stored in conditions likely to encourage corrosion. Keep away from food, drink and animal feeding stuffs. 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.

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

7/16

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	type	Exposure Limit Values	Source
carbon monoxide	MAK STEL	60 ppm 66 mg/m ³	Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001 (09 2007)
	MAK	30 ppm 33 mg/m ³	Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001 (09 2007)
Carbon dioxide	TWA	5.000 ppm 9.000 mg/m ³	EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU (12 2009)
	MAK	5.000 ppm 9.000 mg/m ³	Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001 (09 2007)
	MAK CEIL	10.000 ppm 18.000 mg/m ³	Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001 (09 2007)

DNEL-Values

Critical component	type	Value	Remarks
carbon monoxide	Worker - inhalative, long-term - systemic	23 mg/m ³	-
	Worker - inhalative, short-term - systemic	117 mg/m ³	-
	Worker - inhalative, long-term - local	23 mg/m ³	-
	Worker - inhalative, short-term - local	117 mg/m ³	-

PNEC-Values

Critical component	type	Value	Remarks
carbon monoxide			PNEC not available.

8.2 Exposure controls

Appropriate engineering controls:

Consider a work permit system e.g. for maintenance activities. Ensure adequate air ventilation. Provide adequate general and local exhaust ventilation. Keep concentrations well below occupational exposure limits. Systems under pressure should be regularly checked for leakages. Product to be handled in a closed system and under strictly controlled conditions. Only use permanent leak tight installations (e.g. welded pipes). Do not eat, drink or smoke when using the product.

SAFETY DATA SHEET**Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %**

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

8/16

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. Keep suitable chemically resistant protective clothing readily available for emergency use. Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Protect eyes, face and skin from contact with product. Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

Eye/face protection:

Wear eye protection to EN 166 when using gases.
Guideline: EN 166 Personal Eye Protection.

Skin protection**Hand Protection:**

Wear working gloves while handling containers
Guideline: EN 388 Protective gloves against mechanical risks.
Chemically resistant gloves complying with EN 374 should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Guideline: EN 374-1/2/3 Protective gloves against chemicals and micro-organisms.

Body protection:

No special precautions.

Other:

Wear safety shoes while handling containers
Guideline: ISO 20345 Personal protective equipment - Safety footwear.

Respiratory Protection:

Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances. The selection of the Respiratory Protective Device (RPD) must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected RPD.

Thermal hazards:

No precautionary measures are necessary.

Hygiene measures:

Obtain special instructions before use. 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.

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

9/16

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 CO: Colorless He: Colorless Xe: Colorless N2: Colorless O2: Colorless

Odor:	CO2: Odorless CO: Odorless He: Odorless Xe: Odorless gas N2: Odorless gas O2: Odorless
--------------	---

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

pH: not applicable.

Melting Point: No data available.

Boiling Point: No data available.

Sublimation Point: not applicable.

Critical Temp. (°C): No data available.

Flash Point: Not applicable to gases and gas mixtures.

Evaporation Rate: Not applicable to gases and gas mixtures.

Flammability (solid, gas): This product is not flammable.

Flammability Limit - Upper (%):-: not applicable.

Flammability Limit - Lower (%):-: not applicable.

Vapor pressure: No reliable data available.

Vapor density (air=1): 0,57 (calculated) (15 °C)

Relative density: No data available.

Solubility(ies)

Solubility in Water: No data available.

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

Autoignition Temperature: not applicable.

Decomposition Temperature: Not known.

Viscosity

Kinematic viscosity: No data available.

Dynamic viscosity: No data available.

Explosive properties: Not applicable.

Oxidizing properties: not applicable.

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

10/16

9.2 Other information: None.

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:** No data available.
- 10.4 Conditions to Avoid:** Avoid moisture in the installation.
- 10.5 Incompatible Materials:** Moisture. For material compatibility see latest version of ISO-11114.
- 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: Carbon monoxide: Has been shown to produce adverse effects to the cardiovascular, central nervous, and reproductive systems in laboratory animals and chronically exposed humans.

11.1 Information on toxicological effects

Acute toxicity - Oral Product Based on available data, the classification criteria are not met.

Acute toxicity - Dermal Product Based on available data, the classification criteria are not met.

Acute toxicity - Inhalation Product ATEmix (4 h): 21666,67 ppm

Component Information
carbon monoxide LC 50 (Rat, 4 h): 1300 ppm
LC 50 (Rat, 1 h): 3760 ppm

Repeated dose toxicity Component Information
carbon monoxide LOAEC (Rat, Inhalation): 200 ppm (Target Organ(s): Respiratory system)

SAFETY DATA SHEET**Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %**

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

11/16

Skin Corrosion/Irritation**Product**

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

Component Information

carbon monoxide

Not classified as an irritant.

Serious Eye Damage/Eye Irritation**Product**

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

Component Information

carbon monoxide

Not classified as an irritant.

Respiratory or Skin Sensitization**Product**

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

Component Information

carbon monoxide

No known effects from this product.

Germ Cell Mutagenicity**Product**

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

Component Information

carbon monoxide

There is no evidence of mutagenic potential.

Carcinogenicity**Product**

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

Component Information

carbon monoxide

No evidence of carcinogenic effects.

Reproductive toxicity**Product**

May damage fertility or the unborn child.

Component Information

carbon monoxide

May damage fertility or the unborn child.

Reproductive toxicity (Fertility)**Component Information**

carbon monoxide

NOAEC (embryotoxicity): 65 ppm

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

12/16

Developmental toxicity (Teratogenicity)**Component Information**

carbon monoxide LOAEC: 125 ppm

Specific Target Organ Toxicity - Single Exposure**Product**

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

Component Information

carbon monoxide

Route of Exposure: Inhalation

Target Organ(s): Blood

Causes damage to red blood cells (haemolytic poison). Carbon monoxide binds reversibly to haemoglobin (Hb) to form carboxyhaemoglobin (CoHb), reducing the capacity of the blood to transport oxygen.

Specific Target Organ Toxicity - Repeated Exposure**Product**

May cause damage to organs through prolonged or repeated exposure.

Component Information

carbon monoxide

Route of Exposure: Inhalation

Target Organ(s): Heart

Risk of serious health injuries in case of long term exposure.

Aspiration Hazard**Product**

Not applicable to gases and gas mixtures..

SECTION 12: Ecological information**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..

Component Information

carbon monoxide

Will not undergo hydrolysis.

Biodegradation**Component Information**

carbon monoxide

Not readily biodegradable. Inorganic compound.

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

13/16

12.3 Bioaccumulative Potential**Product**

The product is expected to biodegrade and is not expected to persist for long periods in an aquatic environment.

Component Information

carbon monoxide

Because of the low log Kow, accumulation in organisms is not expected.

12.4 Mobility in Soil**Product**

Because of its high volatility, the product is unlikely to cause ground or water pollution.

Component Information

carbon monoxide

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 Other Adverse Effects:**Global Warming Potential**

Global warming potential: 0,3
When discharged in large quantities may contribute to the greenhouse effect.

Component Information

Carbon dioxide

Global warming potential: 1

carbon monoxide

Global warming potential: 1,9

SECTION 13: Disposal considerations
--

13.1 Waste treatment methods**General information:**

Avoid discharges to atmosphere. Consult supplier for specific recommendations.

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 04*: Gases in pressure containers (including halons) containing dangerous substances.

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013
Last revised date: 27.05.2015

Version: 1.0

SDS No.: 000010022089
14/16

SECTION 14: Transport information
--

ADR

14.1 UN Number: UN 1956
 14.2 UN Proper Shipping Name: COMPRESSED GAS, N.O.S.(Helium, Carbon Monoxide)
 14.3 Transport Hazard Class(es)
 Class: 2
 Label(s): 2.2
 Hazard No. (ADR): 20
 Tunnel restriction code: (E)
 14.4 Packing Group: -
 14.5 Environmental hazards: not applicable
 14.6 Special precautions for user: -

RID

14.1 UN Number: UN 1956
 14.2 UN Proper Shipping Name: COMPRESSED GAS, N.O.S.(Helium, Carbon Monoxide)
 14.3 Transport Hazard Class(es)
 Class: 2
 Label(s): 2.2
 14.4 Packing Group: -
 14.5 Environmental hazards: not applicable
 14.6 Special precautions for user: -

IMDG

14.1 UN Number: UN 1956
 14.2 UN Proper Shipping Name: COMPRESSED GAS, N.O.S.(Helium, Carbon Monoxide)
 14.3 Transport Hazard Class(es)
 Class: 2.2
 Label(s): 2.2
 EmS No.: F-C, S-V
 14.3 Packing Group: -
 14.5 Environmental hazards: not applicable
 14.6 Special precautions for user: -

IATA

14.1 UN Number: UN 1956
 14.2 Proper Shipping Name: Compressed gas, n.o.s.(Helium, Carbon Monoxide)
 14.3 Transport Hazard Class(es)
 Class: 2.2
 Label(s): 2.2
 14.4 Packing Group: -
 14.5 Environmental hazards: not applicable
 14.6 Special precautions for user: -
 Other information
 Passenger and cargo aircraft: Allowed.
 Cargo aircraft only: Allowed.

SAFETY DATA SHEET

Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

15/16

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: not applicable

SECTION 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

Chemical name	CAS-No.	Concentration
carbon monoxide	630-08-0	1,0 - 10%

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.:

Chemical name	CAS-No.	Concentration
carbon monoxide	630-08-0	1,0 - 10%

Directive 96/61/EC: concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registry (EPER):

Chemical name	CAS-No.	Concentration
Carbon dioxide	124-38-9	1,0 - 10%
carbon monoxide	630-08-0	1,0 - 10%

Directive 96/82/EC (Seveso II): on the control of major accident hazards involving dangerous substances:

Chemical name	CAS-No.	Concentration
carbon monoxide	630-08-0	1,0 - 10%
Oxygen	7782-44-7	1,0 - 10%

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	CAS-No.	Concentration
carbon monoxide	630-08-0	1,0 - 10%
Oxygen	7782-44-7	1,0 - 10%

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

SAFETY DATA SHEET**Xe 3 %;O2 3 %;CO2 4 %;CO 6 %;N2 19 %;He 65 %**

Issue Date: 16.10.2013

Version: 1.0

SDS No.: 000010022089

Last revised date: 27.05.2015

16/16

SECTION 16: Other information**Revision Information:** Not relevant.**Key literature references and sources for data:** No data available.**Wording of the R-phrases and H-statements in section 2 and 3**

R61	May cause harm to the unborn child.
R23	Toxic by inhalation.
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
H280	Contains gas under pressure; may explode if heated.

Training information: None.**Classification according to Regulation (EC) No 1272/2008 as amended.**

Repr. 1A, H360D

STOT RE 2, H373

Press. Gas Compr. Gas, H280

Last revised date: 27.05.2015**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.