

Warning



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

1.1. Product identifier

Trade name : Compressed air
SDS no : EIGA000A-ALBNL

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.
Test gas/Calibration gas.
Purging.
Consumer use.
Perform risk assessment prior to use.
Industrial and professional use for chemical analysis, calibration, (routine) quality control,
laboratory use, under controlled conditions.

Uses advised against : None.

1.3. Details of the supplier of the safety data sheet

THE NETHERLANDS:
AIR LIQUIDE BV
De Witbogt 1
5652 AG Eindhoven
the Netherlands-Nederland
Tel: +31 (0)40 250 35 03

BELGIUM:
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Hermeslaan 11
1932 Zaventem
Belgium-Belgique-België
Tel: +32 (0)2 540 86 60

LUXEMBURG:
L'AIR LIQUIDE LUXEMBOURG S.A.
ZONE P.E.D.-B.P.20
L-4801 RODANGE Luxembourg
Tel: +352 26 30 29 03

infosafetydatasheet.albv@airliquide.com
www.airliquide-benelux.com

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Belgium	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid	Rue Bruyn 1 1120 Bruxelles/Brussel	+32 70 245 245	Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee)
Luxembourg	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid	Rue Bruyn 1 1120 Bruxelles/Brussel	+352 8002 5500	Free telephone number with a 24/7 access. Experts answer all urgency questions on dangerous products in French, Dutch and English
Netherlands	Nationaal Vergiftigingen Informatie Centrum	Huispostnummer Q03.2.315 Postbus 85500 3508 GA Utrecht	+31 88 755 80 00	Only for the purpose of informing medical personnel in cases of acute intoxications (24 hours a day, 7 days a week)

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

Mixture does not contain substance (s) classified as PBT or vPvB in concentrations above 0,1 weight %.

The substance/mixture has no endocrine disrupting properties.

The 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.

Mixture does not contain substance(s) classified as PMT or vPvM in concentrations above 0.1 weight %.

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] ATE, EUH-statements, M-Factors
Nitrogen	CAS-No.: 7727-37-9 EC-No.: 231-783-9 EC Index-No.: --- REACH-no: *1	79	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	21	Ox. Gas 1, H270 Press. Gas (Comp.), H280

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

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

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

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

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 : Adverse effects not expected from this product.
- Eye 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

No effect on living tissue.

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.

5.2. Special hazards arising from the substance or mixture

- Specific hazards : Supports combustion.
Exposure to fire may cause containers to rupture/explode.
- Hazardous combustion products : None.

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 : 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. EN 15090 Footwear for firefighters. EN 443 Helmets for fire fighting in buildings and other structures.

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.
See section 8 of the SDS for more information on personal protective equipment.
- For emergency responders : See section 5.3 of the SDS for more information.

6.2. Environmental precautions

None.

6.3. Methods and material for containment and cleaning up

None.

6.4. Reference to other sections

See also sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Safe use of the product

- : Do not breathe gas.
- 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 regularly) 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

- : 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, when provided, 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, when provided, 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.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

- OEL (Occupational Exposure Limits) : None available.
- DNEL (Derived-No Effect Level) : None available.
- PNEC (Predicted No-Effect Concentration) : None available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate general and local exhaust ventilation.
Systems under pressure should be regularly checked for leakages.
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 risks, performance level 1 or higher. Recommended types include wrist gloves from leather or synthetic material with equivalent performance, fabric gloves, fabric gloves with leather palms.

- Other

: Wear safety shoes while handling containers.

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

• Respiratory protection

: Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask.

When indicated by a risk assessment, Respiratory Protective Equipment must be used. 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.

Self contained breathing apparatus is recommended, where unknown exposure may be expected, e.g. during maintenance activities on installation systems.

None necessary.

• 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

: Gas.

- Colour

: Colourless.

Odour

: Odourless.

Melting point / Freezing point

: Not known.

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 applicable.

Upper explosion limit

: Not applicable.

Flash point

: Not applicable for gases and gas mixtures.

Auto-ignition temperature

: Non flammable.

Decomposition temperature

: Not applicable.

pH

: Not applicable for gases and gas mixtures.

Viscosity, kinematic

: No reliable data available.

Water solubility [20°C]

: Not known, but considered to have low solubility.

Partition coefficient n-octanol/water (Log Kow)

: Not applicable for inorganic products.

Vapour pressure [20°C]

: Not applicable.

Vapour pressure [50°C]

: Not applicable.

Density and/or relative density

: Not applicable for gases and gas mixtures.

Relative vapour density (air=1)

: 1

Particle characteristics : Not applicable.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Oxidising properties : No oxidising properties.
Critical temperature [°C] : Not known.

9.2.2. Other safety characteristics

Molar mass : 29 g/mol

SECTION 10: Stability and reactivity

10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below.
Data for mixtures are not available.
This mixture contains components with the following reactivity : Violently oxidises organic material.

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

None.

SECTION 11: Toxicological information

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

Acute toxicity : No toxicological effects from this product.
Skin corrosion/irritation : No known effects from this product.
Serious eye damage/irritation : No known effects from this product.
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.
Toxic for reproduction : Fertility : No known effects from this product.
Toxic for reproduction : unborn child : No known effects from this product.
STOT-single exposure : No known effects from this product.
STOT-repeated exposure : No known effects from this product.
Aspiration hazard : Not applicable for gases and gas mixtures.

11.2. Information on other hazards

Other information : The substance/mixture has no endocrine disrupting properties.

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.

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.

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.

12.2. Persistence and degradability

Assessment : No ecological damage caused by this product.

12.3. Bioaccumulative potential

Assessment : No ecological damage caused by this product.

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 : Not classified as PMT or vPvM.
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.
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. : 1002

14.2. UN proper shipping name

Transport by road/rail/inland waterways (ADR/RID/ADN) : AIR, COMPRESSED
 Transport by air (ICAO-TI / IATA-DGR) : Air, compressed
 Transport by sea (IMDG) : AIR, COMPRESSED

14.3. Transport hazard class(es)

Labelling



2.2 : Non-flammable, non-toxic gases.

Transport by road/rail/inland waterways (ADR/RID/ADN)

Class : 2
 Classification code : 1A
 Hazard identification number : 20
 Tunnel Restriction : E - Passage forbidden through tunnels of category E

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/inland waterways (ADR/RID/ADN) : 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/inland waterways (ADR/RID/ADN) : 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/inland waterways (ADR/RID/ADN) : 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	: Contains no substance(s) listed on the REACH Candidate List.
Other information, restriction and prohibition regulations	: Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals). Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants).
Seveso Directive : 2012/18/EU (Seveso III)	: Covered.

National regulations

Regulatory reference	: Ensure all national/local regulations are observed.
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15.2. Chemical safety assessment

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

SECTION 16: Other information

Indication of changes	: Revised safety data sheet in accordance with commission regulation (EU) No 453/2010.
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Section	Changed item	Comments
	Supersedes version of	Modified
	Revision date	Modified
1	Relevant identified uses	Modified
2.2	Precautionary statements (CLP)	Modified
2.3	Other hazards which do not result in classification	Modified
4.1	First-aid measures after inhalation	Modified
7	Safe handling of the gas receptacle	Modified
9	Upper explosive limit (UEL)	Added
9	Lower explosive limit (LEL)	Added
9	Partition coefficient n-octanol/water (Log Kow)	Added
9	Density	Added
9	Auto-ignition temperature	Added
9	Partition coefficient n-octanol/water (Log Pow)	Added
9	Boiling point	Modified
9	Melting point	Modified
9.1	Explosive limits (vol %)	Removed
9.1	Decomposition temperature	Modified
11.1	Other information	Added
12.7	Other adverse effects	Modified
14	Transport category (RID)	Added
14	Special provisions for RID tanks (RID)	Added
14	Tank codes for RID tanks (RID)	Added

14	Special provisions (RID)	Added
14	Portable tank and bulk container instructions (RID)	Added
14	Proper Shipping Name (RID)	Added
14	Special provisions for carriage - Loading, unloading and handling (RID)	Added
14	Packing instructions (RID)	Added
14	Mixed packing provisions (RID)	Added
14	Limited quantities (RID)	Added
14	Hazard identification number (RID)	Added
14	Excepted quantities (RID)	Added
14	Colis express (express parcels) (RID)	Added
14	Classification code (RID)	Added
14	Limited quantities (ADN)	Added
14	Danger labels (ADN)	Added
14	Excepted quantities (ADN)	Added
14	Equipment required (ADN)	Added
14	Classification code (ADN)	Added
14	Number of blue cones/lights (ADN)	Added
14	UN-No. (RID)	Added
14	Special provisions (IMDG)	Removed
14.1	UN-No. (ADN)	Added
14.2	Proper Shipping Name (ADN)	Added
14.3	Danger labels (RID)	Added
14.6	Special provisions (ADN)	Added
14.6	Special provisions (ADR)	Modified
15	Seveso Directive : 2012/18/EU (Seveso III)	Modified
16	Abbreviations and acronyms	Modified

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 - 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.
 UFI : Unique Formula Identifier.
 ADN -International Carriage of Dangerous Goods by Inland Waterways.
 PROC -Process category
 .
 ERC – Environmental release category.
 PMT - Persistent, Mobile and Toxic.
 vPvM – very Persistent and very Mobile.

Training advice

: None.

Further information

: Classification in accordance with the procedures and calculation methods of Regulation (EC) 1272/2008 (CLP).

Full text of H- and EUH-statements	
Ox. Gas 1	Oxidising Gases, Category 1
Press. Gas (Comp.)	Gases under pressure : Compressed gas
H270	May cause or intensify fire; oxidiser.
H280	Contains gas under pressure; may explode if heated.

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.

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