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

1.1 Product identifier

Commercial name	AZOIDRO cod.13.209
IUPAC Nomenclature	n.a. (this is a mixture)
Synonyms	AZOIDRO
CAS number	n.a. (this is a mixture)
EINECS number	n.a. (this is a mixture)
Index number	n.a. (this is a mixture)
Registration number	The substances that compose the mixture are exempted from Registration according to the provisions of Article 2(7)(a) and Annex IV of REACH

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

* Relevant identified uses: technical gas - industrial use. leak detectors. Welding applications.
Uses advised against: all those not identified as relevant.

1.3 Details of the supplier of the safety data sheet

Supplier	ELKE SRL
Street address	Via XXV Aprile 202
Country	10042 – Nichekino (TO) ITALY
Telephone number	39 011 9622412
e-mail address	info@elke-ac.om

1.4 Emergency telephone number

Centro Antiveleni Ospedale Niguarda Milano +39 02.66101029

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]
Press. Gas, H280

2.2 Label elements

Hazard pictogram(s)

Signal word	Warning	
Hazard statement(s)	H280:	Contains gas under pressure; may explode if heated
Precautionary statement(s)	P410 + P403:	Protect from sunlight. Store in a well-ventilated place

2.3 Other hazards

Do no expose to temperatures exceeding 50°C/ 122°F.

Sezione 3: composizione/informazione sugli ingredienti

3.1 Mixture

CAS number	EINECS number	Index number	Numero di registrazione REACH	% [by mass]	IUPAC Nomenclature	Classification Regulation (EC) No 1272/2008 (CLP)
7727-37-9	231-783-9	nota a	nota b	95	NITROGEN	Press. Gas, H280
*1333-74-0	215-605-7	001-001-00-9	nota b	<= 5	HYDROGEN	Flam. Gas 1 (H220) Press. Gas, H280

nota a: substance exempted from Registration according to the provisions of Article 2(7)(a) and Annex IV of REACH
nota b: substance not included in Annex VI

Section 4: First aid measures

4.1 Description of first aid measures

Do not give anything by oral to the victim.
Evacuate the victim from the danger area to a ventilated area.
- Inhalation: Remove victim to uncontaminated area wearing self contained breathing apparatus. Call a doctor. Apply oxyn or artificial respiration if breathing stopped.
- Skin contact: not expected to present a significant skin hazard under anticipated conditions of normal use
- Eyes contact: not expected to present a significant skin hazard under anticipated conditions of normal use
- 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. Remove victim to uncontaminated area wearing self contained breathing apparatus. Apply artificial respiration if breathing stopped.

4.3 Indication of any immediate medical attention and special treatment needed
For any doubt or persistent symptoms, call a doctor.

Section 5: Firefighting measures

5.1 Extinguishing media
All known extinguishing can be used.

5.2 Special hazards arising from the substance or mixture
Fire exposure can cause the breaking and explosion of the cylinder(s).

5.3 Advice for firefighters
In confined space use self-contained breathing apparatus
Move away from the container and cool with water from a protected position.
If possible, stop flow of products.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Evacuated unnecessary personnel.
Ensure adequate air ventilation.
Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.

6.2 Environmental precautions
Try to stop release.
Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

6.3 Methods and material for containment and cleaning up
If the cylinder loss and it can not be stopped, bring the cylinder outdoors, in a ventilated area, and after that empty it in the atmosphere.

6.4 Reference to other sections
For information regarding personal protection and disposal considerations see section 8 and 13.

Section 7: Handling and storage

7.1 Precautions for safe handling
Do not eat, drink and/or smoke in the working areas or plants.
For container handling, use proper personal protective equipment such as safety shoes and gloves.
Do not allow back feed into the cylinder.
Suck back of liquids into the container must be prevented.
Use only properly specified equipments which are suitable for this product.
Open slowly the valve to avoid pressure blows.
Avoid the direct contact of the product.
Handle carefully the cylinders, thus avoiding violent collisions between them or against other surfaces, as well as falls and other mechanical strains susceptible to damage their integrity/resistance.
Contact your supplier if in doubt.

7.2 Conditions for safe storage, including any incompatibilities
Cylinders should not be stored in conditions likely to encourage corrosion.
Store cylinders in location free from fire risk and away from sources of heat and ignition.
Keep cylinders below 50°C in a well ventilated place.

7.3 Specific end use(s).
Technical gas - industrial use. Welding applications.

Section 8: Exposure controls/personal protection

8.1 Control parameters

8.1.1 Threshold values: n.a.

8.2 Exposure controls

8.2.1 Avoid under-oxygenated atmospheres (O_2<18%). In high concentrations may cause asphyxiation.
Ensure suitable ventilation.
Ensure skin and eyes protection appropriate to the conditions of use.

8.2.2 Eye/face protection: Use safety glasses and face shield in accordance with EN 166
Skin protection: Use gloves according to EN 388
Respiratory protection: No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.
In case of release, please refer to the point 6.1

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Colorless gas
b)	Odour	Odorless
c)	Odour threshold	Not applicable for gas mixtures
d)	pH	Not applicable for gas mixtures
e)	Melting point / freezing point	Not applicable for gas mixtures
f)	Initial boiling point and boiling range	Not applicable for gas mixtures
g)	Flash point	Not applicable for gas mixtures
h)	Evaporation rate	Not applicable for gas mixtures
i)	Flammability (solid, gas)	No flammable
j)	Upper/lower flammability or explosive limits	Not applicable for gas mixtures
k)	Vapour pressure	Not applicable for gas mixtures
l)	Vapour density	Not applicable for gas mixtures
m)	Relative density (air=1)	Lighter or similar to air
n)	Solubility(ies)	No data available
o)	Partition coefficient: n-octanol/water	Not applicable for gas mixtures
p)	Auto-ignition temperature	Not applicable for gas mixtures
q)	Decomposition temperature	Not applicable for gas mixtures
r)	Viscosity	Not applicable
s)	Explosive properties	Not applicable
t)	Oxidising properties	Not applicable

9.2 Other information
None

Section 10: Stability and reactivity

10.1 Reactivity
Inert gas.
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
Keep away from heat/sparks/open flames/hot surfaces.

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

11.1 Information on toxicological effects

a) acute toxicity: no known toxicological effects from this product
b) skin corrosion/irritation: based on available data, the classification criteria are not met.
c) serious eye damage/irritation: based on available data, the classification criteria are not met.
d) respiratory or skin sensitisation: based on available data, the classification criteria are not met.
e) germ cell mutagenicity: based on available data, the classification criteria are not met.
f) carcinogenicity: based on available data, the classification criteria are not met.
g) reproductive toxicity: based on available data, the classification criteria are not met.
h) STOT-single exposure: based on available data, the classification criteria are not met.
i) STOT-repeated exposure: based on available data, the classification criteria are not met.
j) aspiration hazard: not applicable to gases and gas mixtures.

Section 12: Ecological information

12.1 Toxicity
No known ecological damage caused by this product.

12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential

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

12.4 Mobility in soil
The substance is a gas, not applicable.

12.5 Results of PBT and vPvB assessment
Not classified as PBT or vPvB.

12.6 Other adverse effects
No ecological damage caused by this product.

Section 13: Disposal considerations

13.1 Waste treatment methods
Do not discharge into any place where its accumulation could be dangerous, but in atmosphere or well ventilated area. Our gas cylinders are not refillable. If your cylinder must be destroyed, consult distributor or supplier for specific recommendations.

Contact supplier if guidance is required.

List of hazardous waste codes:

For the gas: 16 05 05 (Gases in pressure containers other than those mentioned in 16 05 04*).

For the completely empty cylinder: 15 01 04 (metal packaging)
Refer to section 6 and 7 for handling and action of inadvertent leakage of the waste.

Section 14: Transport information

14.1 UN number
UN 1956

14.2 UN proper shipping name
COMPRESSED GAS, N.O.S. (Nitrogen/Hydrogen)

14.3 Transport hazard class(es)
2.2

14.4 Packing group
n.a.

14.5 Environmental hazards
n.a.

14.6 Special precautions for user
Avoid transport on vehicles where the load space is not separated from the driver's compartment.
Assure that the drivers knows the potential dangers of the loading and he is able to operate in case of emergency.
Ensure that the cylinders are firmly secured.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
n.a.

Additional information
Sea transport
EMS: F-C, S-V
Proper Shipping name: COMPRESSED GAS, N.O.S. (Nitrogen/Hydrogen)

Air transport:

Cargo	Pkg Inst: 200
	Max Net Qty/Pkg: 150kg
Passenger	Pkg Inst: 200
	Max Net Qty/Pkg: 75kg
	ERG Code: 2L

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Seveso directive 2012/18/UE: not covered.

15.2 Chemical safety assessment
A CSA does not need to be carried out for this product

Section 16: Other information

The symbol * indicates that the information has been updated to the current revision.

GENERAL BIBLIOGRAPHY:

1. (EC) Regulation no. 1907/2006 of the European Parliament (REACH)
2. (EC) Regulation no. 1272/2008 of the European Parliament (CLP)
3. Guideline "Assogastecnici" - Edition May 2010
4. ESIS: European chemical Substances Information System
5. European Industrial Gases Association (EIGA) Doc. 169 Classification and Labelling guide

Remark for the User:
The information on this sheet is based on the available knowledge at the time of our last revision.
The user must make sure that information is appropriate and complete for the specific product destination.
This document cannot be considered as a warranty for specific properties of the product.
As product use does not fall on our direct control, the user must bear full responsibility for complying with all the rules and regulations in force relating to hygiene and safety. We disclaim any responsibility for improper uses.