

Date of issue: 30.3.2023

Side: 1 of 9

Revision Date:

Version: 1.0

Product Name:

ATGreen Oxygen

1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Commercial name: **ATGreen Oxygen**

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

Identified uses: Oxygen for athletes

SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against: No specific uses advised against are identified

1.3 Details of the supplier of the safety data sheet:

Producer:	Donnerstag trade s.r.o
Address:	Chocenice 32 Břežany I
company (registration) number:	02143097
Telephone number:	+420 778 002 690
Competent person responsible for the SDS	Ing. Petr Musil
Place of business or residence:	Svinný 45, 583 01 Chotěboř
company (registration) number:	886 82 994
E-mail:	poradenstvi@musil-poradenstvi.com
Telephone number:	+420 607 024 825

1.4 Emergency telephone number

Poison center/ Toxicological Information Center: +420 224 91 92 93; 224 91 54 02 (24 hours/day)

Na Bojišti 1, 128 08 Praha 2, CZ

2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture



According to Regulation 1272/2008 / EC:

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Physical and chemical hazards:

Oxidizing Gases : H270 – Category 1

Gases under pressure : H280 – Compressed gas

2.2 Label elements

Product identifier: **ATGreen Oxygen**



Hazard pictogram:

Signal word: **DANGER**

Hazard statements:

H280 Contains gas under pressure; may explode if heated

H270 May cause or intensify fire; oxidiser

Precautionary statements

Prevention:

P220

P244

Prevention:

Keep away from clothing and other combustible materials

Keep valves and fittings free from oil and grease.

SAFETY DATA SHEET
According to the Commission (EU) 2015/830, (EU) No. 1907/2006

Date of issue: 30.3.2023

Side: 2 of 9

Revision Date:

Version: 1.0

Product Name:

ATGreen Oxygen

Response:

P370+P376

In case of fire: Stop leak if safe to do so.

Storage:

P403

Store in a well-ventilated place

P410

Protect from sunlight.

2.3 Other hazards

Product does not contain ingredients, which meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures				
Chemical name:	Content [wt%]	Identification numbers	Classification according to Regulation (EC) no. 1272/2008 (CLP)	
Oxygen	99,5	CAS EINECS: Index:	7782-44-7 231-956-9 008-001-00-8	Ox. Gas 1 Press. Gas

Full text of the P phrases is listed in the section 16 of this safety data sheet.

4. FIRST AID MEASURES

4.1 Description of first aid measures

First-aid measures after inhalation: Move to fresh air. Get medical advice/attention.

First-aid measures after skin contact: Adverse effects not expected from this product.

First-aid measures after eye contact: Adverse effects not expected from this product. In case of eye irritation: Rinse immediately with plenty of water. Consult an ophthalmologist if irritation persists.

First-aid measures after ingestion: Ingestion is not considered a potential route of exposure.

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

Breathing 75 percent or more oxygen at atmospheric pressure for more than a few hours may cause nasal stuffiness, cough, sore throat, chest pain, and breathing difficulty.

4.3 Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Symptomatic treatment.

5. FIREFIGHTING MEASURES

5.1 Vigorously accelerates combustion. Use media appropriate for surrounding fire. Water (e.g. safety shower) is the preferred extinguishing media for clothing fires

5.2 Oxidizing agent; vigorously accelerates combustion. Contact with flammable materials may cause fire or explosion

5.3 High-pressure, oxidizing gas. Evacuate all personnel from the danger area. Use self-contained breathing apparatus and protective clothing. Immediately cool containers with water from maximum distance. Stop flow of gas if safe to do so, while continuing cooling water spray. Remove ignition sources if safe to do so. Remove containers from area of fire if safe to do so. High-pressure, oxidizing gas. Evacuate all personnel from the danger area. Use self-contained breathing apparatus and protective clothing. Immediately cool containers with water from maximum distance. Stop flow of gas if safe to do so, while continuing cooling water spray. Remove ignition sources if safe to do so. Remove containers from area of fire if safe to do so.

6. ACCIDENTAL RELEASE MEASURES

Date of issue: 30.3.2023

Side: 3 of 9

Revision Date:

Version: 1.0

Product Name:

ATGreen Oxygen

6.1 Stop leak if safe to do so. Prevent gas from entering sewers, basements and places where it is dangerous to accumulate oxygen. Provide adequate ventilation. Notify relevant emergency services.

6.2 Stop leak if safe to do so. Prevent gas from entering sewers, basements and places where it is dangerous to accumulate oxygen. Provide adequate ventilation. Notify relevant emergency services..

6.3 Ventilate the affected area.

6.4 See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

7. HANDLING AND STORAGE

7.1 Wear leather safety gloves and safety shoes when handling cylinders. Protect cylinders from physical damage; do not drag, roll, slide or drop. While moving cylinder, always keep in place removable valve cover. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. High temperatures may damage the container and could cause the pressure relief device to fail prematurely, venting the container contents. For other precautions in using this product, see section 16.

7.2 Store in cool, dry, well-ventilated place. Keep away from children, food, foodstuffs, animal feed and drinking water.

Protect from heat, light and direct sunlight. Do not store with incompatible materials (see subsection 10.5)

7.3 No information about uses other than mentioned in subsection 1.2

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

PNEC: not available

DNEL: workers: Long-term exposure - systemic effects, Dermal: not available

workers: Long-term exposure - systemic effects, Inhalation: not available

Occupational exposure limits in the working environment

Czech Republic (Government Regulation No. 361/2007 Coll., as amended by valid act): not determined. European Union (Directive No. 2006/15/EC and No. 2009/161/EU): not determined.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Avoid oxygen rich (>23.5%) atmospheres. Use a local exhaust system with sufficient flow velocity to maintain an adequate supply of air in the worker's breathing zone. Mechanical (general): General exhaust ventilation may be acceptable if it can maintain an adequate supply of air.

8.2.2 Individual protection measures, such as personal protective equipment

Respiratory system: None necessary

Hands and skin: Wear working gloves when handling gas containers

The material that the gloves are made of must be impenetrable and resistant to the product's effects. The selection of material must be performed with consideration of breakthrough time, penetration speed and degradation.

Moreover, the selection of proper gloves depends not only on the material, but also on other quality features and changes depending on the manufacturer. The producer should provide detailed information regarding the exact breakthrough time. This information should be followed.

Eyes: Wear safety glasses with side shields

Hygiene at work: Apply general hygiene at work rules. After work, remove contaminated clothes and wash thoroughly the whole body. Wash your hands and face during breaks. Restrain from drinking and eating or smoking at work.

8.2.3 Environmental exposure controls

Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Gas

Colour: Colourless

Odour Characteristic, with a hint of mint

Smell threshold Information unavailable

pH Information unavailable

Melting/ clotting point -219 °C

Initial boiling point and boiling range -183 °C

Date of issue: 30.3.2023

Side: 4 of 9

Revision Date:

Version: 1.0

Product Name:

ATGreen Oxygen

Flash point Not applicable for gases and gas mixtures

Critical temperature: -118 °C

Evaporation rate Information unavailable

Flammability (solid, gas): Not applicable

Upper/lower flammability or explosive limits; Information unavailable

Vapour pressure Information: unavailable

Vapour density Information: unavailable

Relative density Information: Auto-ignition temperature Non flammable

Decomposition temperature Information: unavailable

Viscosity Information: unavailable

Explosive properties: Not applicable.

Oxidising properties: Oxidiser unavailable

Solubility [water]: 39 mg/l w 20 °C

Auto-ignition temperature: Non flammable

Decomposition temperature Information: unavailable

Viscosity Information: unavailable

Explosive properties: Not applicable.

Oxidising properties: Oxidiser

9.2 Other information

Surface tension at 20 °C: Non applicable

Refraction index: Non applicable

Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level

10. STABILITY AND REACTIVITY

10.1 Reactivity

No reactivity under recommended storage and handling conditions.

10.2 Chemical stability

The product is stable under normal conditions of handling and storage

10.3 Possibility of hazardous reactions

Violently oxidizes organic material

10.4 Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5 Incompatible materials

Keep equipment free from oil and grease. Consider the potential toxicity hazard due to the presence of chlorinated or fluorinated polymers in high pressure (> 30 bar) oxygen lines in case of combustion. May react violently with combustible materials. May react violently with reducing agents.

10.6 Hazardous decomposition products

Not known.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Based on available information, classification criteria are not met

Skin corrosion/irritation

Based on available information, classification criteria are not met

Serious eye damage/irritation

Based on available information, classification criteria are not met

Respiratory or skin sensitisation

Based on available information, classification criteria are not met

Germ cell mutagenicity

Based on available information, classification criteria are not met

Carcinogenicity

Based on available information, classification criteria are not met

Reproductive toxicity

Date of issue: 30.3.2023

Side: 5 of 9

Revision Date:

Version: 1.0

Product Name:

ATGreen Oxygen

Based on available information, classification criteria are not met
Specific target organ toxicity - single exposure
Based on available information, classification criteria are not met
Specific target organ toxicity - repeated exposure
Based on available information, classification criteria are not met
Based on available information, classification criteria are not met
Aspiration hazard

12. EKOLOGICAL INFORMATION

12.1 Toxicity

Toxicity of product

No ecological damage caused by this product

12.2 Persistence and degradability

Not applicable to gases and gas mixtures.

12.3 Bioaccumulative potential

The substance occurs naturally.

12.4 Mobility in soil

Because of its high volatility, the product is unlikely to cause ground or water pollution. Partition into soil is unlikely. The mobility of the substance depends on their hydrophilic and hydrophobic properties and abiotic and biotic conditions of soil, including its structures, climatic conditions, seasons (in Poland, in a variable moderate climate) and soil organisms, mainly (bacteria, fungi, algae, invertebrates).

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

The substance is not classified as hazardous to the ozone layer. There should be considered the possibility of other harmful effects of the individual components of the mixture on the environment. (eg. the ability of disrupting endocrine, the impact of global warming potential).

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal methods for the mixture: do not deposit with household waste. Disposal in accordance with the local legislation. Waste code should be assigned in place of formation.

Disposal methods for used packing: reuse/recycling/liquidation of empty containers dispose in accordance with the local legislation. Containers contaminated with product residues should be treated in the same way as the product. Only containers completely emptied can be reused.

Legal basis: Directive 2008/98/EC, 94/62/EC.

The legislation on the waste:

Czech Republic

Act No. 185/2001 Coll., on waste and amending some other Acts, as amended by valid act. Decree of the Ministry of Environment No. 381/2001 Coll., which determines the Waste Catalogue, as amended by valid act.

European Union

Directive No. 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Text with EEA relevance).

Council Directive No. 91/689/EEC of 12 December 1991 on hazardous waste as amended by Directives No. 94/31/EC of 27 June 1994 and No. 2008/98/EC of the European Parliament and of the Council of 19 November 2008 and Regulation (EC) No. 166/2006 of the European Parliament and of the Council of 18 January 2006.

14. TRANSPORT INFORMATION



14.1 UN number

UN 2037

14.2 UN proper shipping name

ECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)

SAFETY DATA SHEET
According to the Commission (EU) 2015/830, (EU) No. 1907/2006

Date of issue: 30.3.2023

Side: 6 of 9

Revision Date:

Version: 1.0

Product Name:

ATGreen Oxygen

14.3 Transport hazard class (es) 2

Classification code: 5O

Danger labels: 2.2 (5.1)

14.4 Packing group

Not applicable

14.5 Environmental hazards

This product is not a threat to the environment

14.6 Special precautions for user

Limited Quantity: 1 L

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

Inapplicable

15. REGULATORY INFORMATION

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

Other legislation:

- 1. 1907/2006/EC** Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- 2. 1272/2008/EC** of the Regulation of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures - amending and repealing Directive 67/548/EEC and 1999/45/EC, and Regulation (EC) No 1907/2006.
- 3. 2018/669/UE** Commission Regulation (EU) 2018/669 of 16 April 2018 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures. Text with EEA relevance.
- 4. 790/2009/EC** of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.
- 5. 2008/98/EC** Directive of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives
- 6. 94/62/EC** Commission Directive 2013/2/EU of 7 February 2013; amending Annex I to Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste
- 7. 2015/830/EU** Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 8. 2013/10/EU** Commission Directive of 19 March 2013 amending Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures Text with EEA relevance
9. European Agreement Concerning the International Carriage of Dangerous Goods by Road 2019-2021

15.2 Chemical safety assessment

The supplier has not assessed chemical safety

16. OTHER INFORMATION

IUCLID Data Bank (European Commission – European Chemicals Bureau).

ESIS – European Chemical Substances Information System (European Chemicals Bureau).

Safety Data Sheet made by: **Feed Reach Consulting**

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.

The card has been developed on the basis of an ingredient safety data sheet, literature data, online databases (e.g. ECHA, TOXNET, COSING) and the knowledge and experience I have

SAFETY DATA SHEET
According to the Commission (EU) 2015/830, (EU) No. 1907/2006

Date of issue: 30.3.2023

Side: 7 of 9

Revision Date:

Version: 1.0

Product Name:

ATGreen Oxygen

H (hazard) phrases specified in point 2 and 3 hereof: H270

Oxidizing Gases
H280

[Press. Gas (Comp.)]

Explanation of returns

PBT
vPvB
ADR

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training. Drivers should be trained and obtain proper certification in accordance with the requirements of ADR.

May cause or intensify fire;
oxidiser
Hazard Category 1
Contains gas under pressure; may
explode if heated
Compressed gas

Persistent, Bioaccumulative and Toxic substance
Very Persistent and Very Bioaccumulative
European Agreement concerning the International
Carriage of Dangerous Goods by Road