

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Carbon dioxide

Revision date: 13.12.2023

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

1.1. Product identifier

ALIGAL™ DRINK 2 (refrigerated)

Substance name: carbon dioxide
CAS No: 124-38-9
EC No: 204-696-9

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

Use of the substance/mixture

Gases under presussure

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: Sodapop GmbH
Street: Senefelderstr. 44
Place: D-51469 Bergisch Gladbach
Telephone: +49 (2202) 105700
E-mail: info@sodapop.com
Internet: https://www.sodapop.com/

Telefax: +49 (2202) 105750

1.4. Emergency telephone number:

+49 (0) 228 19240 (9:00-17:00, Mo.-Fr.)

Further Information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)
This substance is exempted from Registration according to the provisions of Article 2(7)a and Annex IV of REACH

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Press. Gas (Comp.); H280

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

Contains gas under pressure; may explode if heated.

Precautionary statements

Protect from sunlight. Store in a well-ventilated place.

Additional advice on labelling

Asphyxiant in high concentrations.

2.3. Other hazards

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Skin contact may cause skin drying and/or freezing.

The substances in the mixture (> 0.1%) do not meet the PBT/vPvB criteria according to REACH, annex XIII.

This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria. This product does not contain a substance (> 0,1 %) that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 3: Composition/information on ingredients**3.1. Substances****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
124-38-9	carbon dioxide			99 - < 100 %
	204-696-9			
	Press. Gas (Comp.); H280			

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

Further Information

Product does not contain listed SVHC substances > 0.1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

This substance is exempted from Registration according to the provisions of Article 2(7)a and Annex IV of REACH

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In high concentration the gas may cause a suffocation. Victim may not be aware of asphyxiation. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Can cause frostbite.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

No information available.

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

Respiratory complaints

4.3. Indication of any immediate medical attention and special treatment needed

Thaw frosted parts with lukewarm water. Do not rub affected area. Danger of suffocation in case of accumulation in lowlying or closed rooms. Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

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Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

No information available.

5.2. Special hazards arising from the substance or mixture

No information available.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Stop leak if safe to do so. Avoid direct contact with released material. Stay upwind.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains. In case of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Ventilate affected area. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

For emergency responders

Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Eliminate leaks immediately. Ventilate affected area.

6.3. Methods and material for containment and cleaning up

For containment

Stop leak if safe to do so. Avoid direct contact with released material. Stay upwind.

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas. Take precautionary measures against static discharges. Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Heating causes rise in pressure with risk of bursting.

Advice on general occupational hygiene

Always close containers tightly after the removal of product.

When using do not eat, drink or smoke.

Wash hands before breaks and after work.

Further information on handling

General protection and hygiene measures: refer to chapter 8

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7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Provide adequate ventilation.

Hints on joint storage

Do not store together with: Explosives. Flammable liquids. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. Self-reactive substances and mixtures. Organic peroxides. Combustible toxic substances. Non-combustible toxic substances. Radioactive substances. Infectious substances. Combustible liquids.

Further information on storage conditions

Recommended storage temperature: 10 - 30 °C. Do not store at temperatures over: 50 °C

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
124-38-9	Carbon dioxide	5000	9000		TWA (8 h)	
		15000	27000		STEL (15 min)	

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly sealed safety glasses. EN 166

Hand protection

Wear suitable gloves.

Use safety gloves of following materials: NBR (nitrile) / neopren / viton (permeationslevel 5 - 6), Cat. II according to norm EN 388.

Standard EN 511 - Cold insulating gloves.

Skin protection

Wear safety shoes while handling containers. Standard EN ISO 20345 - Personal protective equipment - Safety footwear.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

Exceeding exposure limit values

Insufficient ventilation

Self-contained open circuit breathing apparatus (compressed air breathing apparatus) (EN 137).

Use only respiratory protection equipment with CE-symbol including four digit test number.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Gas
Colour:	colourless
Odour:	characteristic
Odour threshold:	not determined
Melting point/freezing point:	-78,5 °C
Boiling point or initial boiling point and boiling range:	-56,6 °C
Flammability:	none
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	not relevant
Viscosity / kinematic:	not determined
Water solubility:	2 g/L
Solubility in other solvents	not determined
Dissolution rate:	not relevant
Partition coefficient n-octanol/water:	0,83
Dispersion stability:	not relevant
Vapour pressure:	57300 hPa
(at 20 °C)	
Density:	1,52 (air=1) g/cm ³
Bulk density:	not relevant
Relative vapour density:	not determined
Particle characteristics:	not relevant

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Self-ignition temperature

Solid: not relevant

Gas: not determined

Oxidizing properties

Flammable gases

Other safety characteristics

Evaporation rate: not determined

Solvent separation test: not determined

Solvent content: not relevant

Solid content: not relevant

Sublimation point: not determined

Softening point: not relevant

Pour point: not relevant

Critical temperature T_c (°C): 30 °C

Viscosity / dynamic: not determined

Flow time: not determined

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No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Heating causes rise in pressure with risk of bursting.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

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

Toxicokinetics, metabolism and distribution

No information available.

Acute toxicity

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

Irritation and corrosivity

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

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Specific effects in experiment on an animal

No information available.

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

No data available.

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

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The product has not been tested.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

160505 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers other than those mentioned in 16 05 04

List of Wastes Code - used product

160505 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers other than those mentioned in 16 05 04

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	UN 1013
<u>14.2. UN proper shipping name:</u>	CARBON DIOXIDE
<u>14.3. Transport hazard class(es):</u>	2
<u>14.4. Packing group:</u>	-
Hazard label:	2.2



Classification code:	2A
Special Provisions:	378 392 584 653 662
Limited quantity:	120 mL
Excepted quantity:	E1
Transport category:	3
Hazard No:	20
Tunnel restriction code:	C/E

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	UN 1013
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14.2. UN proper shipping name: CARBON DIOXIDE

14.3. Transport hazard class(es): 2

14.4. Packing group: -

Hazard label: 2.2



Classification code: 2A

Special Provisions: 378 392 584 653 662

Limited quantity: 120 mL

Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 1013

14.2. UN proper shipping name: CARBON DIOXIDE

14.3. Transport hazard class(es): 2.2

14.4. Packing group: -

Hazard label: 2.2



Special Provisions: 378 392

Limited quantity: 120 mL

Excepted quantity: E1

EmS: F-C, S-V

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1013

14.2. UN proper shipping name: CARBON DIOXIDE

14.3. Transport hazard class(es): 2.2

14.4. Packing group: -

Hazard label: 2.2



Special Provisions: A202

Limited quantity Passenger: Forbidden

Passenger LQ: Forbidden

Excepted quantity: E1

IATA-packing instructions - Passenger: 200

IATA-max. quantity - Passenger: 75 kg

IATA-packing instructions - Cargo: 200

IATA-max. quantity - Cargo: 150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

refer to chapter 6 - 8

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

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EU regulatory information

2010/75/EU (VOC):	not determined
2004/42/EC (VOC):	not determined
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)
 REACH 1907/2006 Appendix XVII, No (mixture): 3
 The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	-- non-hazardous to water

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information**Changes**

Rev. 1,0; Initial release: 17.05.2023

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 CAS: Chemical Abstracts Service
 CLP: Classification, Labelling and Packaging of substances and mixtures
 DNEL: Derived No Effect Level
 d: day(s)
 EINECS: European Inventory of Existing Commercial chemical Substances
 ELINCS: European List of Notified Chemical Substances
 ECHA: European Chemicals Agency
 EWC: European Waste Catalogue
 IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organization
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
 h: hour
 LOAEL: Lowest observed adverse effect level
 LOAEC: Lowest observed adverse effect concentration
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 NOAEL: No observed adverse effect level
 NOAEC: No observed adverse effect concentration
 NLP: No-Longer Polymers
 N/A: not applicable
 OECD: Organisation for Economic Co-operation and Development
 PNEC: predicted no effect concentration
 PBT: Persistent bioaccumulative toxic
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

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fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

REACH: Registration, Evaluation, Authorisation of Chemicals

SVHC: substance of very high concern

TRGS: Technische Regeln für Gefahrstoffe

UN: United Nations

VOC: Volatile Organic Compounds

WGK: Water Hazard Class (Germany)

Relevant H and EUH statements (number and full text)

Contains gas under pressure; may explode if heated.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.