

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date: 21.12.2023

Version number: 3.0 (replaces version 2.0)

Revision: 21.12.2023

**SECTION 1: Identification of the substance/mixture and of the company/undertaking:****1.1 Product identifier:****Trade name:** GLUKON Citrus-Reiniger-Spray (Dose)**UFI:** 1V7A-HM9P-5H69-1QC9**1.2 Relevant identified uses of the substance or mixture and uses advised against:**

No further relevant information available.

**Application of the substance / the preparation:** Cleaning agent/ Cleaner**1.3 Details of the supplier of the safety data sheet:****Manufacturer/Supplier:**

BÖKER Sprühklebersysteme GmbH

Wegkamp 1

24589 Dätgen

Fon +49 (0) 4329-91128-0

Fax +49 (0) 4329-91128-29

E-Mail: info@glukon.de

www.glukon.de

**Further information obtainable from:** BÖKER Sprühklebersysteme GmbH**1.4 Emergency telephone number:**

Giftinformationszentrum-Nord / GIZ-Nord Poisons Centre

Telefon / Phone +49 (0) 551/19240

24h / 7d

**SECTION 2: Hazards identification:****2.1 Classification of the substance or mixture:****Classification according to Regulation (EC) No 1272/2008:**

GHS02 flame

Aerosol 1            H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS09 environment

Aquatic Acute 1    H400            Very toxic to aquatic life.

Aquatic Chronic 1 H410            Very toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2            H315            Causes skin irritation.

Skin Sens. 1            H317            May cause an allergic skin reaction.

**2.2 Label elements:****Labelling according to Regulation (EC) No 1272/2008:**

The product is classified and labelled according to the CLP regulation.

**Hazard pictograms:**

GHS02



GHS07



GHS09

(Contd. on page 2)

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(Contd. of page 1)

**Signal word:** Danger

**Hazard-determining components of labelling:**

(R)-p-mentha-1,8-diene

**Hazard statements:**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:**

Restricted to professional users.

Buildup of explosive mixtures possible without sufficient ventilation.

**2.3 Other hazards:**

**Results of PBT and vPvB assessment:**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients:**

**3.2 Mixtures:**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

CAS: 5989-27-5	(R)-p-mentha-1,8-diene	60-100%
EINECS: 227-813-5	⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; Skin Sens. 1B, H317	

CAS: 68476-85-7	petroleum gases, liquefied	30-60%
EINECS: 270-704-2	⚠ Flam. Gas 1A, H220; ⚠ Press. Gas (Comp.), H280	

**Additional information:** For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures:**

**4.1 Description of first aid measures:**

**General information:**

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

In cases of frost bites, rinse with plenty of water. Do not remove clothing.

**After eye contact:**

Rinse opened eye for several minutes under running water.

Call a doctor immediately.

**After swallowing:**

Rinse out mouth and then drink plenty of water.

Call for a doctor immediately.

**4.2 Most important symptoms and effects, both acute and delayed:**

No further relevant information available.

(Contd. on page 3)

## Safety data sheet according to 1907/2006/EC, Article 31

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---

**Trade name: GLUKON Citrus-Reiniger-Spray (Dose)**

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(Contd. of page 2)

**4.3 Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

**SECTION 5: Firefighting measures:****5.1 Extinguishing media:****Suitable extinguishing agents:**CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**5.2 Special hazards arising from the substance or mixture:** Can form explosive gas-air mixtures.**5.3 Advice for firefighters:****Protective equipment:**

Do not inhale explosion gases or combustion gases.

Mouth respiratory protective device.

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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

Use respiratory protective device against the effects of fumes/dust/aerosol.

**6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.**6.3 Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

**6.4 Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Keep away from heat and direct sunlight.

Use only in well ventilated areas.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

**Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray onto a naked flame or any incandescent material.

Fumes can combine with air to form an explosive mixture.

Emergency cooling must be available in case of nearby fire.

**7.2 Conditions for safe storage, including any incompatibilities:****Storage:****Requirements to be met by storerooms and receptacles:**

Store in a cool location.

Store only in the original receptacle.

Observe official regulations on storing packagings with pressurised containers.

**Information about storage in one common storage facility:** Store away from foodstuffs.**Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

(Contd. on page 4)

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---

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---

**Storage class: 2 B****7.3 Specific end use(s):** No further relevant information available.

(Contd. of page 3)

### SECTION 8: Exposure controls/personal protection:

#### 8.1 Control parameters:

##### **Ingredients with limit values that require monitoring at the workplace:**

##### **68476-85-7 petroleum gases, liquefied**

OEL Short-term value: 2250 mg/m<sup>3</sup>, 1250 ppmLong-term value: 1800 mg/m<sup>3</sup>, 1000 ppm

#### 8.2 Exposure controls:

**Appropriate engineering controls:** No further data; see section 7.

##### **Individual protection measures, such as personal protective equipment:**

##### **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Immediately remove all soiled and contaminated clothing.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not eat or drink while working.

##### **Respiratory protection:**

If the occupational exposure limit value (e.g. through adequate ventilation at the workplace or through the work place or a stationary extraction device at the workpiece), respiratory protection is not required. required.

The product contains low-boiling substances. In exceptional situations (e.g. unintentional release of substances release of the substance, exceeding the occupational exposure limit), respiratory protection must be worn. Here is

generally for a short time (observe filter size and breakthrough time) full-face mask with an AX filter insert (e.g. filter no. 6098 from 3M, use only factory-fresh!). For concentrations above the application limit of filter devices, with oxygen contents below 17 vol% or in unclear conditions conditions, use an insulating device (DIN EN 137, observe wearing time limit).

**Hand protection:** Protective gloves

##### **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

##### **Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

##### **As protection from splashes gloves made of the following materials are suitable:**

Fluorocarbon rubber (Viton)

##### **Not suitable are gloves made of the following materials:**

Leather gloves

Strong material gloves

Butyl rubber, BR

Nitrile rubber, NBR

Natural rubber, NR

Chloroprene rubber, CR

PVC gloves

**Eye/face protection:** Tightly sealed goggles

(Contd. on page 5)

**Safety data sheet**  
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Revision: 21.12.2023

Trade name: **GLUKON Citrus-Reiniger-Spray (Dose)**

(Contd. of page 4)

**SECTION 9: Physical and chemical properties:**

**9.1 Information on basic physical and chemical properties:**

**General Information:**

<b>Physical state:</b>	Aerosol
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.
<b>Melting point/freezing point:</b>	Undetermined.
<b>Boiling point or initial boiling point and boiling range:</b>	Not applicable, as aerosol.
<b>Flammability:</b>	Not applicable.
<b>Lower and upper explosion limit:</b>	
<b>Lower:</b>	0.7 Vol %
<b>Upper:</b>	12 Vol %
<b>Flash point:</b>	Not applicable, as aerosol.
<b>Decomposition temperature:</b>	Not determined.
<b>pH:</b>	Not determined.
<b>Viscosity:</b>	
<b>Kinematic viscosity:</b>	Not determined.
<b>Dynamic:</b>	Not determined.
<b>Solubility:</b>	
<b>water:</b>	Partly miscible.
<b>Partition coefficient n-octanol/water (log value):</b>	Not determined.
<b>Vapour pressure:</b>	Not determined.
<b>Density and/or relative density:</b>	
<b>Density:</b>	Not determined.
<b>Relative density:</b>	Not determined.
<b>Vapour density:</b>	Not determined.

**9.2 Other information:**

**Appearance:**

**Form:** Aerosol

**Important information on protection of health and environment, and on safety.:**

**Ignition temperature:**

Product is not selfigniting.

**Explosive properties:**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

**Solvent content:**

**VOC (EC):** 678 g/l

**Change in condition:**

**Evaporation rate:** Not applicable.

**Information with regard to physical hazard classes:**

<b>Explosives:</b>	Void
<b>Flammable gases:</b>	Void
<b>Aerosols:</b>	Extremely flammable aerosol. Pressurised container: May burst if heated.
<b>Oxidising gases:</b>	Void
<b>Gases under pressure:</b>	Void
<b>Flammable liquids:</b>	Void
<b>Flammable solids:</b>	Void
<b>Self-reactive substances and mixtures:</b>	Void
<b>Pyrophoric liquids:</b>	Void

(Contd. on page 6)

## Safety data sheet according to 1907/2006/EC, Article 31

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Trade name: **GLUKON Citrus-Reiniger-Spray (Dose)**

(Contd. of page 5)

<b>Pyrophoric solids:</b>	Void
<b>Self-heating substances and mixtures:</b>	Void
<b>Substances and mixtures, which emit flammable gases in contact with water:</b>	Void
<b>Oxidising liquids:</b>	Void
<b>Oxidising solids:</b>	Void
<b>Organic peroxides:</b>	Void
<b>Corrosive to metals:</b>	Void
<b>Desensitised explosives:</b>	Void

### SECTION 10: Stability and reactivity:

**10.1 Reactivity:** No further relevant information available.**10.2 Chemical stability:****Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**10.3 Possibility of hazardous reactions:** Forms explosive gas mixture with air.**10.4 Conditions to avoid:** No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.**10.6 Hazardous decomposition products:**

Flammable gases/vapours

Carbon monoxide and carbon dioxide

### SECTION 11: Toxicological information:

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:****Acute toxicity:** Based on available data, the classification criteria are not met.**LD/LC50 values relevant for classification:****5989-27-5 (R)-p-mentha-1,8-diene**

Oral LD50 &gt;2,000 mg/kg (rat)

Dermal LD50 &gt;5,000 mg/kg (rabbit)

**Skin corrosion/irritation:**

Causes skin irritation.

**Serious eye damage/irritation:** Based on available data, the classification criteria are not met.**Respiratory or skin sensitisation:**

May cause an allergic skin reaction.

**Germ cell mutagenicity:** Based on available data, the classification criteria are not met.**Carcinogenicity:** Based on available data, the classification criteria are not met.**Reproductive toxicity:** 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.**11.2 Information on other hazards:****Endocrine disrupting properties:**

None of the ingredients is listed.

### SECTION 12: Ecological information:

**12.1 Toxicity:****Aquatic toxicity:****5989-27-5 (R)-p-mentha-1,8-diene**

EC50 0.307 mg/l /48 h (daphnia)

LC50 0.72 mg/l /96 h (fish)

(Contd. on page 7)

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**Trade name: GLUKON Citrus-Reiniger-Spray (Dose)**

(Contd. of page 6)

ERC50 0.32 mg/l /72 h (algae)

**12.2 Persistence and degradability:** No further relevant information available.**12.3 Bioaccumulative potential:** No further relevant information available.**12.4 Mobility in soil:** No further relevant information available.**12.5 Results of PBT and vPvB assessment:****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties:**

The product does not contain substances with endocrine disrupting properties.

**12.7 Other adverse effects:****Additional ecological information:****General notes:**

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

### SECTION 13: Disposal considerations:

#### 13.1 Waste treatment methods:

**Recommendation:**

Product: Dispose of in accordance with local regulations.

According to the European Waste Catalogue (EWC), waste code numbers are not product-related but application-related.

Waste code numbers should be assigned by the consumer, if possible in consultation with the waste disposal authorities.

Contaminated packaging: Take empty containers to a recognised waste disposal facility for recovery or disposal. Return empty pressurised containers to the supplier.

Unless otherwise specified: Dispose of as unused product.

**Waste disposal key:**

The following waste code numbers are only intended as a recommendation.

Used product:

16 05 04, gases in pressurised containers containing dangerous substances (including halons)

Emptied packaging in accordance with the Packaging Ordinance:

Emptied, uncontaminated packaging of non-hazardous goods can be sent to the collection systems for sales packaging for recycling.

Unused product:

16 05 04, gases containing dangerous substances in pressurised containers (including halons).

uncleaned packaging 15 01 10, packaging containing residues of hazardous substances or contaminated by hazardous substances.

**European waste catalogue:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Uncleaned packaging:****Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information:

**14.1 UN number or ID number:****ADR, IMDG, IATA**

UN1950

**14.2 UN proper shipping name:****ADR**1950 AEROSOLS, ENVIRONMENTALLY  
HAZARDOUS**IMDG**

AEROSOLS, MARINE POLLUTANT

**IATA**

AEROSOLS, flammable

(Contd. on page 8)

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(Contd. of page 7)

**14.3 Transport hazard class(es):**

**ADR**



**Class:** 2.5F Gases.  
**Label:** 2.1

**IMDG**



**Class:** 2.1 Gases.  
**Label:** 2.1

**IATA**



**Class:** 2.1 Gases.  
**Label:** 2.1

**14.4 Packing group:**

**ADR, IMDG, IATA**

Void

**14.5 Environmental hazards:**

Product contains environmentally hazardous substances: (R)-p-mentha-1,8-diene

**Marine pollutant:**

Symbol (fish and tree)

**Special marking (ADR):**

Symbol (fish and tree)

**14.6 Special precautions for user:**

Warning: Gases.

**Hazard identification number (Kemler code):**

-

**EMS Number:**

F-D,S-U

**Stowage Code:**

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

SG69 For AEROSOLS with a maximum capacity of 1 litre:

Segregation as for class 9. Stow "separated from" class 1 except for division 1.4.

For AEROSOLS with a capacity above 1 litre:

Segregation as for the appropriate subdivision of class 2.

For WASTE AEROSOLS:

Segregation as for the appropriate subdivision of class 2.

**14.7 Maritime transport in bulk according to IMO instruments:**

Not applicable.

**Transport/Additional information:**

**ADR**

**Limited quantities (LQ):** 1L

**Transport category:** 2

(Contd. on page 9)



## Safety data sheet according to 1907/2006/EC, Article 31

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---

**Trade name: GLUKON Citrus-Reiniger-Spray (Dose)**

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**Tunnel restriction code:**

D

**UN "Model Regulation":**UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY  
HAZARDOUS

(Contd. of page 8)

### SECTION 15: Regulatory information:

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

**Directive 2012/18/EU:****Named dangerous substances - ANNEX I:** None of the ingredients is listed.**Seveso category:**

E1 Hazardous to the Aquatic Environment

P3a FLAMMABLE AEROSOLS

**Qualifying quantity (tonnes) for the application of lower-tier requirements:** 100 t**Qualifying quantity (tonnes) for the application of upper-tier requirements:** 200 t**REGULATION (EC) No 1907/2006 ANNEX XVII:** Conditions of restriction: 3**DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II:**

None of the ingredients is listed.

**REGULATION (EU) 2019/1148:****Regulation (EC) No 273/2004 on drug precursors:**

None of the ingredients is listed.

**Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors:**

None of the ingredients is listed.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Relevant phrases:**

H220 Extremely flammable gas.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**Department issuing SDS:**

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**Contact:** Dr. Axel Deeg**Version number of previous version:** 2.0**Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

(Contd. on page 10)

**Safety data sheet**  
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---

**Trade name: GLUKON Citrus-Reiniger-Spray (Dose)**

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(Contd. of page 9)

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1A: Flammable gases – Category 1A

Aerosol 1: Aerosols – Category 1

Press. Gas (Comp.): Gases under pressure – Compressed gas

Flam. Liq. 3: Flammable liquids – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1B: Skin sensitisation – Category 1B

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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