

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

Printing date: 18.12.2023

Version number: 3.0 (replaces version 2.0)

Revision: 18.12.2023

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

1.1 Product identifier:

Trade name: GLUKON flex plus (Druckbehälter)

UFI: 2W0U-VA1N-KN00-CR1V

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: Industrial adhesive spray - for industrial use only

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 Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

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

Signal word: Danger

Hazard-determining components of labelling:

pentane

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hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Hazard statements:

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

H336 May cause drowsiness or dizziness.

H411 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.

P405 Store locked up.

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:

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: 115-10-6	dimethyl ether	30-60%
EINECS: 204-065-8	☠ Flam. Gas 1A, H220; ⚠ Press. Gas (Comp.), H280	
Reg.nr.: 01-2119472128-37		
CAS: 109-66-0	pentane	10-30%
EINECS: 203-692-4	☠ Flam. Liq. 2, H225; ☠ Asp. Tox. 1, H304; ☠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336, EUH066	
Reg.nr.: 01-2119459286-30		
EC number: 921-024-6	hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	10-30%
Reg.nr.: 01-2119475514-35	☠ Flam. Liq. 2, H225; ☠ Asp. Tox. 1, H304; ☠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336	
CAS: 67-64-1	acetone	1-5%
EINECS: 200-662-2	☠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	
Reg.nr.: 01-2119471330-49		

Specific concentration limit: STOT SE 3; H336: C ≥ 10 %

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.

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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: Frost bites**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:**CO₂, 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:**

Mouth respiratory protective device.

Do not inhale explosion gases or combustion gases.

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.

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.

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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.

Storage class: 2 B**7.3 Specific end use(s):** No further relevant information available.**SECTION 8: Exposure controls/personal protection:****8.1 Control parameters:****Ingredients with limit values that require monitoring at the workplace:****115-10-6 dimethyl ether**OEL Long-term value: 1920 mg/m³, 1000 ppm

IOELV

109-66-0 pentaneOEL Long-term value: 3000 mg/m³, 1000 ppm

IOELV

67-64-1 acetoneOEL Long-term value: 1210 mg/m³, 500 ppm

IOELV

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.

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)

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Not suitable are gloves made of the following materials:

Leather gloves
Strong material gloves
Natural rubber, NR
Chloroprene rubber, CR
Nitrile rubber, NBR
Butyl rubber, BR
PVC gloves

Eye/face protection: Tightly sealed goggles

SECTION 9: Physical and chemical properties:

9.1 Information on basic physical and chemical properties:

General Information:

Physical state:	Aerosol
Colour:	Amber coloured
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range:	Not applicable, as aerosol.
Flammability:	Not applicable.
Lower and upper explosion limit:	
Lower:	1.4 Vol % (109-66-0 pentane)
Upper:	18.6 Vol % (115-10-6 dimethyl ether)
Flash point:	Not applicable, as aerosol.
Decomposition temperature:	Not determined.
pH:	Not determined.
Viscosity:	
Kinematic viscosity:	Not determined.
Dynamic:	Not determined.
Solubility:	
water:	Not miscible or difficult to mix.
Partition coefficient n-octanol/water (log value):	Not determined.
Vapour pressure at 20 °C:	5,200 hPa (115-10-6 dimethyl ether)
Density and/or relative density:	
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	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):	590 g/l
Change in condition:	
Evaporation rate:	Not applicable.

Information with regard to physical hazard

classes:	
Explosives:	Void

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Flammable gases:	Void
Aerosols:	Extremely flammable aerosol. Pressurised container: May burst if heated.
Oxidising gases:	Void
Gases under pressure:	Void
Flammable liquids:	Void
Flammable solids:	Void
Self-reactive substances and mixtures:	Void
Pyrophoric liquids:	Void
Pyrophoric solids:	Void
Self-heating substances and mixtures:	Void
Substances and mixtures, which emit flammable gases in contact with water:	Void
Oxidising liquids:	Void
Oxidising solids:	Void
Organic peroxides:	Void
Corrosive to metals:	Void
Desensitised explosives:	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:** 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:****67-64-1 acetone**

Oral LD50 5,800 mg/kg (rat)

Dermal LD50 20,000 mg/kg (rabbit)

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

May cause drowsiness or dizziness.

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.

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SECTION 12: Ecological information:

12.1 Toxicity:**Aquatic toxicity:** No further relevant information available.**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 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even 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

UN3501

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14.2 UN proper shipping name:

ADR

3501 CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (DIMETHYL ETHER, PENTANES), ENVIRONMENTALLY HAZARDOUS

IMDG

CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (DIMETHYL ETHER, PENTANES), MARINE POLLUTANT

IATA

CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (DIMETHYL ETHER, PENTANES)

14.3 Transport hazard class(es):

ADR



Class:

2 8F Gases.

Label:

2.1

IMDG



Class:

2 Gases.

Label:

2.1

IATA



Class:

2 Gases.

Label:

2.1

14.4 Packing group:

ADR, IMDG, IATA

Void

14.5 Environmental hazards:

Product contains environmentally hazardous substances: pentane

Marine pollutant:

Symbol (fish and tree)

Special marking (ADR):

Symbol (fish and tree)

14.6 Special precautions for user:

Warning: Gases.

EMS Number:

F-D,S-U

Stowage Category:

D

Stowage Code:

SW2 Clear of living quarters.

14.7 Maritime transport in bulk according to IMO

instruments:

Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ):

0

Transport category:

2

Tunnel restriction code:

B/D

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UN 3501 CHEMICAL UNDER PRESSURE,
FLAMMABLE, N.O.S. (DIMETHYL ETHER,
PENTANES), 2.1, ENVIRONMENTALLY
HAZARDOUS

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:**

P3a FLAMMABLE AEROSOLS

E2 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements: 150 t**Qualifying quantity (tonnes) for the application of upper-tier requirements:** 500 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:**

67-64-1 acetone: 3

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

67-64-1 acetone: 3

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.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

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)

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IMDG: International Maritime Code for Dangerous Goods
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. 2: Flammable liquids – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
