

Safety Data Sheet

According to EC-Regulation 2020/878; Internal K Gluconate 120

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

1.1 Product identifier

Trade Name: Internal K Gluconate 120
Product Number.: 08 3015
Reach registration number: not applicable

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

Relevant identified uses of the substance or mixture
Chemical for research and use in laboratories
Uses advised against: -
The full text of any mentioned and identified use categories are given in section 1.6.

1.3 Details of the supplier of the safety data sheet

Company and address: Nanion Technologies GmbH
Ganghoferstrasse 70a
D-80339 Munich
Germany
Contact person: Dr. Niels Fertig, CEO
Email: info@nanion.de
SDS date: 13.05.2025
SDS Version: 3.0

1.4 Emergency telephone number

Contact the National Poison Information (dial 112, 24h service; Germany). See section 4 "First aid measures".
Giftnotrufzentrale Berlin, Emergency telephone: +49 30 19240 (day and night)
See also section 4 for first aid measures.

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP), as amended by Regulation (EU) 2024/2865.

2.2 Label Elements

Hazard pictogram(s):

not applicable

Signal word:

not applicable

Hazard statement(s):

not applicable

Safety statement(s):

General –
Prevention: -

Buffer solutions - Safety Data Sheet

Response: -
Storage: -
Disposal: -

Hazardous substances:

Nothing special

2.3 Other hazards

This product does not contain substances identified as endocrine disruptors according to Regulation (EU) 2018/605.

Additional labelling:
Safety data sheet available on request (EUH210).

Tools: Automated patch clamp Safety Data Sheet according to Regulation (EU) 2020/878 amending Annex II of Reach (EC) No. 1907/2006 1/8 buffer solutions.

Additional warnings:
This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

VOC: -

Section 3: Compositions/information on ingredients

3.1/3.2 Substances/Mixtures

Does not contain any substances required to report

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

(*) See full text of H-phrases in chapter 16. Occupational exposure limits are listed in section 8, if these are available.

Other information:
nothing special

Section 4: First aid measures

4.1 Description of first aid measures

General Information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation:

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact:

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact:

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) and continue until irritation stops.

Buffer solutions - Safety Data Sheet

Ingestion:

Provide plenty of water for the person to drink and stay with him/her. In Case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of/or choking on vomited material.

Burns:

not applicable

4.2 Most important symptoms and effects, both acute and delayed

nothing special.

4.3 Indication of any immediate medical attention and special treatment needed

Nothing Special.

Information to medics:

Bring this Safety Data Sheet.

Section 5: Firefighting measures

5.1 Extinguishing media

Nothing special.

5.2 Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂).

Some metal oxides.

5.3 Advice for firefighters

Fire fighters should wear appropriate personal protective equipment.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedure

No specific requirements.

6.2 Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3 Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect noncombustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4 Reference to other sections

See section 13 on "Disposal considerations" in regard of handling of waste.

Buffer solutions - Safety Data Sheet

See section 8 "Exposure controls/personal protection" for protective measures.

Section 7: Handling and storage

7.1 Precautions for safe handling

Smoking, storage tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section 8 on "Exposure Controls/Personal Protection" for information on personal protection.

7.2 Conditions for safe storage, including any incompatibilities

No special conditions required. Recommended storage material

Always store in containers of the same material as the original container.

Storage class

Storage class 12 (Non-combustible liquids)

TRGS 510 - Storage of hazardous substances in non-stationary containers

Storage temperature

Refrigerator, 2 to 8°C

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3 Specific end use(s)

This product should only be used for applications quoted in section 1.2.

Section 8: Exposure controls/personal protection

8.1 Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

No data available

PNEC

No data available

8.2 Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

Buffer solutions - Safety Data Sheet

Wash hands after use.

Measures to avoid environmental exposure

No specific requirements

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

No specific requirements

Skin protection

No specific requirements

Hand protection

No specific requirements

Eye protection

No specific requirements

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state

Liquid

Colour

Colourless

Odour / Odour threshold

Testing not relevant or not possible due to nature of the product.

pH

7,4

Density (g/cm³)

Testing not relevant or not possible due to nature of the product.

Kinematic viscosity

Testing not relevant or not possible due to nature of the product.

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

Testing not relevant or not possible due to nature of the product.

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C)

Testing not relevant or not possible due to nature of the product.

Vapour pressure

Testing not relevant or not possible due to nature of the product.

Relative vapour density

Testing not relevant or not possible due to nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Testing not relevant or not possible due to nature of the product.

Ignition (°C)

Testing not relevant or not possible due to nature of the product.

Auto flammability (°C)

Buffer solutions - Safety Data Sheet

Testing not relevant or not possible due to nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to nature of the product.

Solubility

Solubility in water

Testing not relevant or not possible due to nature of the product.

n-octanol/water coefficient

Testing not relevant or not possible due to nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solubility in fat (g/L): No data available.

Section 10: Stability and reactivity

10.1 Reactivity:

No data available.

10.2 Chemical stability:

The product is stable under the conditions, noted in the section "Handling and Storage".

10.3 Possibility of hazardous reactions:

Nothing special.

10.4 Conditions to avoid:

Nothing special

10.5 Incompatible materials:

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6 Hazardous decomposition products:

The product is not degraded when used as specified in "Section 1".

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.

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 sensitisation

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

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

Buffer solutions - Safety Data Sheet

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 toxicological products

Long term effects
Nothing special
Endocrine disrupting properties:

The product is free from known endocrine disruption substances. Due to the high purity required for electrophysiological application, no plasticizers, additives or potential hormone-active components are present.

Other information
Nothing special

Section 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

No special

12.7. Other adverse effects

No special

Section 13: Disposal considerations

13.1 Waste treatment methods

EWC code

Not applicable

Specific labelling

Not applicable

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

Section 14: Transport information

14.1 - 14.4

Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

Not applicable

Buffer solutions - Safety Data Sheet

IMDG

Not applicable

MARINE POLLUTANT

No data available.

14.7. Maritime transport in bulk according to IMO instruments

No data available

Section 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

Demands for specific education

No specific requirements

SEVESO - Categories / dangerous substances

Not applicable

Additional information

WGK class: WGK 1

Sources

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV)

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2 Chemical safety assessment: -

not applicable

Section 16: Other information:

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

Buffer solutions - Safety Data Sheet

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit.

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVCB = Complex hydrocarbon substance

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

In accordance with Article 31 of REACH, a safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis to distribute relevant information as required under Article 32 of REACH.

The safety data sheet is validated by

AN

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: DE-en

The safety data sheet is validated by:

Axel Brüggemann (Product Manager Reagents)

Date of the last essential change: 02.07.2024

(Cipher in SDS version) 2.0

Date of last minor change: 25.06.2024 (Cipher in SDS version) 1.3

9/9