

Material Safety Data Sheet

Sodium Gluconate

Version: 2.0 EN

Revision Date: 2025-1

SECTION 1: IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1 Product identifiers

Product Name Sodium Gluconate

CAS No 527-07-1

D-Gluconic acid sodium salt, Sodium D-gluconate,

Synonyms 2,3,4,5,6-Pentahydroxycaproic acidsodium salt, D-Gluconate sodium salt

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

Recommended Use Chemical intermediate, For research and industrial use only

1.3 Details of the supplier of the safety data sheet

Company China lithium Products technology Company Limited

9 HG, No.99 LuJiang Road, Xiamen city, China

Telephone +86 592 2687860

Email info@lithium-chemical.com

1.4 Emergency telephone number

Emergency phone # +86 592 2687860

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture

2.2 GHS Label elements, including precautionary statements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

Hazard Statements

No data available

Precautionary Statements

No data available

Supplemental Hazard Statements

None

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

2.4 Other hazards

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS



3.1 Substances

Substance name Sodium Gluconate

Formula $C_6H_{11}NaO_7$ CAS No 527-07-1 EC No 208-407-7

Hazardous ingredients: No data available

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled

Provide fresh air

In case of skin contact

Brush off loose particles from skin. Rinse skin with water/shower

In case of eye contact

Rinse out with plenty of water. Remove contact lenses

If swallowed

Make victim drink water (two glasses at most). Consult doctor if feeling unwell

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Sodium oxides

Combustible

Development of hazardous combustion gases or vapours possible in the event of fire

5.3 Advice for firefighters www.lithium-chemical.com

Wear self-contained breathing apparatus for firefighting if necessary

5.4 Further information

None

SECTION 6: ACCIDENTAL RELEASE MEASURES



6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert

For personal protection see section 8

6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so, Do not let the chemical enter drains, Discharge into the environment must be avoided

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts

6.4 Reference to other sections

For disposal see section 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling

For precautions see section 2.2

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry

Storage class

Storage class (TRGS 510): 11: Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control

Contains no substances with occupational exposure limit values

parameters:

8.2 Exposure controls

Appropriate engineering controls:

Change contaminated clothing. Wash hands after working with substance

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Respiratory protection

required when dusts are generated

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system

Control of environmental exposure



Do not let product enter drains

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Form: solid
Colour: beige

Odour No data available
Odour Threshold No data available

pH 6.5 - 7.5

Melting point/freezing point 205 - 209 °C Initial boiling point and boiling range 613.1 °C

Flash point No data available Evaporation rate No data available

Flammability (solid, gas) May form combustible dust concentrations in air

Upper/lower flammability or

explosive limits

No data available

Vapour pressure < 0.1 hPa at 25 °C
Vapour density 1.79 g/cm3 at 20 °C
Relative density No data available

Water solubility 590 g/l at 25 °C

Partition coefficient: n- octanol/water log Pow: -5.99 - Bioaccumulation is not expected

Auto-ignition temperature > 200 °C

Decomposition temperature 196 - 198 °C

Viscosity No data available

Explosive properties No data available
Oxidizing properties No data available

9.2 Other safety information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No additional information available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature)

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

10.4 Conditions to avoid

Exposure to light may affect product quality

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No information available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

LD50 Oral - Rat - 6,060 mg/kg

Acute toxicity:

Remarks: The value is given in analogy to the following substances:

potassium D-gluconate Inhalation: No data available

Dermal: No data available

Skin - Rabbit

Skin corrosion/irritation: Result: No skin irritation

(Regulation (EC) No. 440/2008, Annex, B.4)

Eyes - Rabbit

Serious eye damage/eye irritation: Result: No eye irritation

(Draize Test)

Respiratory or skin sensitization: Not classified

Test Type: S. typhimurium

Germ cell mutagenicity:

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available



SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to daphnia and other aquatic NOEC - Daphnia magna (Water flea) - > 1,000 mg/l - 48 h

invertebrates: (OECD Test Guideline 202)

Toxicity to algae: ErC50 - Selenastrum capricornutum (green algae) - > 1,000 mg/l - 72 h

(OECD Test Guideline 201)

12.2 Persistence and degradability

Result: 89 % - Readily biodegradable

(OECD Test Guideline 301D)

Remarks: (External MSDS)

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

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

No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities

SECTION 14: TRANSPORT INFORMATION

ADR/RID

UN number: No Packing group: No Environmental hazards: No

Proper shipping name: No Transport hazard class(es): No

IMDG

IMDG UN number: No Packing group: No Environmental hazards: No

Proper shipping name: No Transport hazard class(es):No

IATA

UN number: No Packing group: No Environmental hazards: No

Proper shipping name: No Transport hazard class(es): No

SECTION 15: REGULATORY INFORMATION

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



National regulatory information

No data available

15.2 Other regulations

Please pay attention on the waste treatment should also comply with local regulations requirement

SECTION 16: OTHER INFORMATION

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. China Lithium Product Technology Co., Ltd.(CLPC) and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.lithium-chemical.com for additional terms and conditions of sale.