# SAFETY DATA SHEETS

According to the UN GHS revision 9

Creation Date: July 15, 2019 Revision Date: September 13, 2023

# **SECTION 1: Identification**

# 1.1 GHS Product identifier

Product name Gluconic Acid (contains Gluconolactone) (45-50% in Water)

1.2 Other means of identification

Product number 526-95-4

Other names Gluconic acid; gluconic; Gluconic Acid.sodium acid.

1.3 Recommended use of the chemical and restrictions on use

**Identified uses** For laboratory and Industrial use only.

Uses advised against no data available

1.4 Supplier's details

Company Zhongshan Greenrock Technology Co., Ltd.

Address Jinsan Avenue, Sanjiao Town, Zhongshan City, Guangdong Province, China

Telephone +86-2087066781

1.5 Emergency phone number

Emergency phone number +86-2087066781

Service hours 'Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## **SECTION 2: Hazard identification**

## 2.1 Classification of the substance or mixture

Not classified.

# 2.2 GHS label elements, including precautionary statements

Pictogram(s)No symbol.Signal wordNo signal word

Hazard statement(s) none

Precautionary statement(s)

PreventionnoneResponsenoneStoragenoneDisposalnone

## 2.3 Other hazards which do not result in classification

no data available

# SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Gluconic Acid (contains Gluconolactone) (45-50% in Water)	D-gluconic acid	526-95-4	208-401-4	100%

# **SECTION 4: First-aid measures**

# 4.1 Description of necessary first-aid measures

If inhaled

Fresh air, rest.

## Following skin contact

Rinse skin with plenty of water or shower.

## Following eye contact

Rinse with plenty of water (remove contact lenses if easily possible).

#### Following ingestion

Rinse mouth.

# 4.2 Most important symptoms/effects, acute and delayed

no data available

# 4.3 Indication of immediate medical attention and special treatment needed, if necessary

Absorption, Distribution and Excretion

99)tcm-labeled gluconate was accumulated relatively early in the kidney, and esp in the urinary tract.

# **SECTION 5: Fire-fighting measures**

#### 5.1 Suitable extinguishing media

Use powder, alcohol-resistant foam, water spray, carbon dioxide.

## 5.2 Specific hazards arising from the chemical

Combustible.

# 5.3 Special protective actions for fire-fighters

Use powder, alcohol-resistant foam, water spray, carbon dioxide.

# **SECTION** 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water.

#### 6.2 Environmental precautions

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water.

## 6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

NO open flames. Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

## 7.2 Conditions for safe storage, including any incompatibilities

Separated from strong oxidants.MAY BE STORED IN STAINLESS STEEL DRUMS. COMMERCIAL PRODUCT

# SECTION 8: Exposure controls/personal protection

# 8.1 Control parameters

# Occupational Exposure limit values

no data available

# Biological limit values

no data available

# 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

## 8.3 Individual protection measures, such as personal protective equipment (PPE)

## Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

# Respiratory protection

Use local exhaust or breathing protection.

#### Thermal hazards

no data available

# SECTION 9: Physical and chemical properties and safety characteristics

Physical state Liquid

Colour NEEDLES FROM ETHANOL & ETHER

Odour no data available

Melting point/freezing point 265°C(dec.)(lit.)

Boiling point or initial boiling point and 125°C/14.3mmHg

boiling range

Flammability Combustible.

Lower and upper explosion no data available

limit/flammability limit

Flash point 2°C(lit.)

Auto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data available

Solubility FREELY SOL IN WATER; SLIGHTLY SOL IN ALC, INSOLUBLE IN ETHER AND MOST

OTHER ORGANIC SOLVENTS

Partition coefficient n-octanol/water -1.87 (estimated)
Vapour pressure no data available
Density and/or relative density 1.24 (50-52% aq.)
Relative vapour density no data available
Particle characteristics no data available

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

On combustion, forms carbon monoxide. Reacts with strong oxidants. The solution in water is a medium strong acid.

# 10.2 Chemical stability

no data available

# 10.3 Possibility of hazardous reactions

No data.On combustion, forms carbon monoxide. Reacts with strong oxidants. The solution in water is a medium strong acid.

# 10.4 Conditions to avoid

no data available

# 10.5 Incompatible materials

no data available

# 10.6 Hazardous decomposition products

no data available

# **SECTION 11: Toxicological information**

# Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

## Skin corrosion/irritation

no data available

#### Serious eye damage/irritation

no data available

#### Respiratory or skin sensitization

no data available

## Germ cell mutagenicity

no data available

# Carcinogenicity

no data available

#### Reproductive toxicity

no data available

#### STOT-single exposure

no data available

#### STOT-repeated exposure

no data available

## Aspiration hazard

Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly when dispersed.

# **SECTION 12: Ecological information**

## 12.1 Toxicity

- Toxicity to fish: no data available
- · Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: 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 Other adverse effects

no data available

# **SECTION 13: Disposal considerations**

# 13.1 Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

## Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

# **SECTION 14: Transport information**

# 14.1 UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference IATA: Not dangerous goods. (For reference only, please check.)

only, please check.)

## 14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference IATA: Not dangerous goods. (For reference only, please check.)

only, please check.)

# 14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference IATA: Not dangerous goods. (For reference only, please check.)

## 14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference IATA: Not dangerous goods. (For reference only, please check.)

# 14.5 Environmental hazards

ADR/RID: No IMDG: No IATA: No

## 14.6 Special precautions for user

no data available

#### 14.7 Transport in bulk according to IMO instruments

no data available

# **SECTION 15: Regulatory information**

# Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
D-gluconic acid	D-gluconic acid	526-95-4	208-401-4
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.
Korea Existing Chemicals List (KECL)			Listed.

# **SECTION 16: Other information**

#### Information on revision

July 15, 2019 Creation Date **Revision Date** September 13, 2023

#### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

#### References

- IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- IARC International Agency for Research on Cancer, website: http://www.iarc.fr/

  eChemPortal The Global Portal to Information on Chemical Substances by OECD, website:
  - http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

- ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
   ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
   ECHA European Chemicals Agency, website: https://echa.europa.eu/

# Other Information

The commercial form is a 50 % aqueous solution, which is a colorless to brownish liquid.

Any questions regarding this SDS, Please send your inquiry to export@greenrockchem.com

Disclaimer: 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. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.