SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.1 Creation Date: July 15, 2019 Revision Date: April 16, 2024

SECTION 1: Identification

1.1 GHS Product identifier

Product name Succinic Anhydride

1.2 Other means of identification

Product number 108-30-5

Other names SAN; 3,4-dihydrofuran-2,5-dione; succinylanhydride

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

Acute toxicity - Category 4, Oral Skin corrosion, Category 1 Serious eye damage, Category 1 Skin sensitization, Category 1 Respiratory sensitization, Category 1

2.2 GHS label elements, including precautionary statements

Pictogram(s)







Signal word Danger

Hazard statement(s) H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage H317 May cause an allergic skin reaction

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statement(s)

Prevention P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection/...

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

P272 Contaminated work clothing should not be allowed out of the workplace.

P284 [In case of inadequate ventilation] wear respiratory protection.

Response P301+P317 IF SWALLOWED: Get medical help.

P330 Rinse mouth.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P363 Wash contaminated clothing before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P316 Get emergency medical help immediately. P321 Specific treatment (see ... on this label).

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P305+P354+P338 IF IN EYES: Immediately rinse with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P317 Get medical help.

P302+P352 IF ON SKIN: Wash with plenty of water/...
P333+P317 If skin irritation or rash occurs: Get medical help.
P362+P364 Take off contaminated clothing and wash it before reuse.

P342+P316 If experiencing respiratory symptoms: Get emergency medical help immediately.

Storage P405 Store locked up.

Disposal P501 Dispose of contents/container to an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product characteristics at time of disposal.

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
Succinic Anhydride	Succinic anhydride	108-30-5	203-570-0	100%

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled

Fresh air, rest.

Following skin contact

Rinse and then wash skin with water and soap.

Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

Following ingestion

Rinse mouth. Give one or two glasses of water to drink.

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

no data available

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

5.2 Specific hazards arising from the chemical

Combustible. Gives off irritating or toxic fumes (or gases) in a fire. Finely dispersed particles form explosive mixtures in air.

5.3 Special protective actions for fire-fighters

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

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

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 sparkproof 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

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

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 riskelimination area

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

Eye/face protection

Wear safety goggles or eye protection in combination with breathing protection if powder.

Skin protection

Protective gloves.

Respiratory protection

Use local exhaust or breathing protection.

Thermal hazards

no data available

SECTION 9: Physical and chemical properties and safety characteristics

Solid. Crystalline. Physical state

Colour Colourless needles from alcohol or rhombic pyramids from chloroform or carbon tetrachloride.

Odour no data available

Melting point/freezing point 119 °C. Remarks:No exothermal decomposition was seen in the temperature range in

preliminary tests.

Boiling point or initial boiling point and 263.5 °C. Atm. press.:98.49 kPa. Remarks:No exothermal decomposition was seen in

boiling range preliminary tests. Flammability no data available no data available Lower and upper explosion

limit/flammability limit

157°C Flash point

Auto-ignition temperature no data available no data available Decomposition temperature no data available pН Kinematic viscosity

Solubility In water: 62.9 g/L. Temperature:20 °C. pH:2.2.

Partition coefficient n-octanol/water $\log Pow = 2.44$. Temperature: 40 °C. Vapour pressure 0 mm Hg. Temperature:25 °C.

1.5. Temperature:20 °C.;1.1. Temperature:20 °C.;1.23. Temperature:20 °C. Density and/or relative density

Relative vapour density 3.5 (vs air) Particle characteristics no data available

10.1 Reactivity

no data available

10.2 Chemical stability

no data available

Possibility of hazardous reactions 10.3

Decomposes on heating. This produces irritating fumes.

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

The substance is severely irritating to the eyes. The substance is irritating to the respiratory tract.

STOT-repeated exposure

no data available

Aspiration hazard

A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

SECTION 12: Ecological information

12.1 **Toxicity**

- Toxicity to fish: LC50 Danio rerio (previous name: Brachydanio rerio) > 100 mg/L 96 h.
 Toxicity to daphnia and other aquatic invertebrates: EC50 Daphnia magna > 100 mg/L 48 h.
 Toxicity to algae: EC50 Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) > 100 mg/L - 72 h.
- Toxicity to microorganisms: EC50 activated sludge of a predominantly domestic sewage > 300 mg/L 3 h. Remarks:Respiration

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.)

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.)

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

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

Chemical name	Common names and synonyms	CAS number	EC number	
Succinic anhydride	Succinic anhydride	108-30-5	203-570-0	
European Inventory of Existing Commercial Chemical Substances (EINECS)				
EC Inventory				
United States Toxic Substances Control Act (TSCA) Inventory				
China Catalog of Hazardous chemicals 2015				
New Zealand Inventory of Chemicals (NZIoC)				
Philippines Inventory of Chemicals and Chemical Substances (PICCS)				
Vietnam National Chemical Inventory				
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)				
Korea Existing Chemicals List (KECL)				

SECTION 16: Other information

Information on revision

Creation Date July 15, 2019
Revision Date April 16, 2024

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

- LARC 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://cameocnemicals.hoaa.gov/search/shipie
 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/

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.