

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 17.06.2019

Version number 1

Revision: 17.06.2019

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

1.1 Product identifier

Trade name: Trisodium citrate dihydrate

CAS number:

6132-04-3

EC number:

200-675-3

REACH registration number: 01-2119457027-40-0006

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

Application of the substance / the preparation:

Intermediate

Formulation

Detergents and cleaning products

Agricultural applications

Personal care products

Paper industry

Construction products

Polymers and plastics

Oil industry

Textile industry

Paints and coatings

Photography products

Laboratory reagents

Water treatment

Treatment of metal surfaces

Medical devices

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

LAIWU TAIHE BIOCHEMISTRY CO.LTD

NO.89 CHANGJIANG STREET, LAIWU, SHANDONG, CHINA

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38025 Grenoble, FRANCE

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Fax: +33 476 295 870

Email: clients@reachteam.eu

www.reachteam.eu

1.4 Emergency telephone number(s):

NHS Direct: 111 (England and Scotland), 0845 46 47 (Wales).

National Poisons Information Service (NPIS): 0344 892 0111 (healthcare professionals only).

Ireland - National Poisons Information Centre: 01 837 9964 or 01 809 2566 (healthcare professionals only).

Mr.Han Bangqin Phone:0086-18763465197.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The substance is not classified according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008: Not applicable.

Hazard pictograms: Not applicable.

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Trade name: Trisodium citrate dihydrate**Signal word:** Not applicable.**Hazard statements:** Not applicable.

2.3 Other hazards

Results of PBT and vPvB assessment**PBT:** No PBT.**vPvB:** No vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

CAS Number. Description.

6132-04-3 Trisodium citrate dihydrate

Identification number(s)**EC number:** 200-675-3

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation: Move patient to fresh air, if symptoms persist consult a doctor.**After skin contact:**

Immediately rinse with water.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Do not induce vomiting; call for medical help immediately.

Rinse out mouth and then drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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:

Use extinguishing measures appropriate to local circumstances and the environment.

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

Carbon monoxide (CO)

Carbon dioxide (CO₂)

5.3 Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information:

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

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Do not allow to enter sewers/ surface or ground water.
Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Dispose of the material collected according to official regulations.
Send for recovery or disposal in suitable receptacles.
Pick up and transfer to properly labelled containers. After cleaning, flush away traces with water.

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**

Avoid contact with the eyes and skin.
Ensure good ventilation/exhaustion at the workplace.
Provide suction extractors if dust is formed.
Do not inhale dust / smoke / mist.

Information about fire - and explosion protection: No special measures required.**7.2 Conditions for safe storage, including any incompatibilities****Requirements to be met by storerooms and receptacles:**

Store only in unopened original receptacles.
Store in cool, dry conditions in well sealed receptacles.

Information about storage in one common storage facility: Not required.**Further information about storage conditions:**

Packaging material: Polyethylene coated paper bags, Polyvinyl or Polyethylene/propylene big bags.

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:** Not required.**PNECs**

PNEC	1000 mg/L (Activated Sludge) (Citric acid)
	0.44 mg/L (Water (Freshwater)) (Citric acid)
	0.044 mg/L (Water (Marine Water)) (Citric acid)
	3.46 mg/kg sedim. dw (Sediment (Marine Water)) (Citric acid)
	34.6 mg/kg sedim. dw (Sediment (Freshwater)) (Citric acid)

Additional information: The lists valid during the making were used as basis.**8.2 Exposure controls****Personal protective equipment****General protective and hygienic measures:**

Do not get in eyes, on skin, or on clothing.
Wash hands before breaks and at the end of work.
Do not eat, drink, smoke or sniff while working.

Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

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Trade name: Trisodium citrate dihydrate**Protection of hands:**

Protective gloves.

Eye protection:

Safety glasses with side-shields (EN 166).

Body protection: Protective work clothing.**Limitation and supervision of exposure into the environment**

Avoid the release of the product into the environment. Comply with local and national law.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Form: Solid.
Crystalline

Colour: White.

Odour: Odourless.

Odour threshold: Not determined.

pH-value: 7.6 - 9**Melting point/freezing point:** Not applicable.**Initial boiling point and boiling range:** Not applicable.**Flash point:** Not applicable.**Flammability (solid, gas):** Product is not flammable.**Ignition temperature:** Not determined.**Decomposition temperature:** 150°C**Explosive properties:** Product does not present an explosion hazard.**Explosion limits:**

Lower: Not determined.

Upper: Not determined.

Oxidising properties None.**Vapour pressure:** negligible (citric acid)**Density at 20°C:** 1.86 g/cm³ (trisodium citrate pentahydrate)**Relative density** Not determined.**Vapour density** Not applicable.**Evaporation rate** Not applicable.**Solubility in / Miscibility with****Water at 20°C:** 400-700 g/L**Partition coefficient: n-octanol/water:** -0.2 to -1.8 log Pow (citric acid)**Viscosity:****Dynamic:** Not applicable.

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Kinematic: Not applicable.

9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No data available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: Stable at environment temperature.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid

Keep away from heat and direct sunlight.

Keep away from water/moisture, acids and bases.

10.5 Incompatible materials Sodium nitrite, potassium nitrite.

10.6 Hazardous decomposition products Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

LD/LC50 values:

Oral	LD50	5.4 g/Kg bw (Mouse) (OECD 401, read across from citric acid)
Dermal	LD50	>2000 mg/kg (Rat) (OECD 402, read across from citric acid)

Primary irritant effect:

Skin corrosion/irritation: Not irritating. Rabbit, OECD 404.

Serious eye damage/irritation: Not irritating. Rabbit, OECD 405.

Respiratory or skin sensitisation: Not sensitising. guinea pig, OECD 406

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

Germ cell mutagenicity: Negative. EU B.22, OECD 475, read across from citric acid.

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: 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.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

LC50/24h	1535 mg/L (Daphnia Magna) (Bringmann and Kuhn (1977), read across from citric acid)
LC50/48h	440 mg/L (Fish) (OECD 203, read across from citric acid)
NOEC/8h	425 mg/L (Algae) (Bringmann and Kuhn (1974), read across from citric acid)

12.2 Persistence and degradability Readily biodegradable.

12.3 Bioaccumulative potential Does not accumulate in organisms.

12.4 Mobility in soil pKa: 3.13, 4.76 and 6.4 at 25 °C (Citric acid)

Additional environmental information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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Trade name: Trisodium citrate dihydrate**12.5 Results of PBT and vPvB assessment****PBT:** No PBT.**vPvB:** No vPvB.**12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation:** Must be specially treated adhering to official regulations.**Uncleaned packaging:****Recommendation:**

Disposal must be made according to official regulations.

Packaging that may not be cleansed must be disposed of in the same manner as the product.

SECTION 14: Transport information**14.1 UN Number****ADR, ADN, IMDG, IATA** Not applicable.**14.2 UN proper shipping name****ADR, ADN, IMDG, IATA** Not applicable.**14.3 Transport hazard class(es)****ADR, ADN, IMDG, IATA****Class** Not applicable.**14.4 Packing group****ADR, IMDG, IATA** Not applicable.**14.5 Environmental hazards****Marine pollutant:** No**14.6 Special precautions for user** Not applicable.**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment A Chemical Safety Assessment has 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.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent