

Safety Data Sheet
According to Regulation (EU) No. 1907/2006, Annex II,
Amended by REGULATION (EU) No 453/2010

Nitrilotriacetic Trisodium

SDS Record Number: CSSS-TCO-010-100286

Printing date: 30/11/2010

Version 1.1

Revision date: 31/10/2014

1 Identification of the substance and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name:	Nitrilotriacetic Trisodium
Additional identification:	N,N-Bis (Carboxymethoxy) glycine; Triglycollamic Acid trisodium, NTA powder
Identification of the product:	CAS# 5064-31-3; EC# 225-768-6
Index Number:	Not available
REACH registration No.:	Not available

1.2 Relevant identified uses of the substance and uses advised against:

1.2.1 Identified uses:

Preliminary/intermediate product for organic syntheses.

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative):	Chemical Inspection & Regulation Service Limited
Supplier(Manufacturer):	BEIJING SIHE SCIENCE AND TECHNOLOGY LIMITED COMPANY
Address:	Add: 2107#,18floor,No.9East Third Ring Road,Chaoyang District,Beijing City,China
Contact person(E-mail):	chengxin@hebeichengxin.com
Telephone:	+86 10-85911521
Fax:	+86 10- 85911915

1.4 Emergency telephone Number:

+353-41-980 6916

Available outside office hours?

YES

NO

2 Hazards Identification

2.1 Classification of the substance

2.1.1 Classification:

The substance is classified as following according to 67/548/EEC and REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Acute Tox. 4	H302
Eye Irrit.2	H319
Carc. 2	H351

For full text of H- phrases: see section 2.2.

67/548/EEC	
Hazards characteristics	R-Phrases
Xn	R22
Xi	R36
Carc. Cat. 3	R40

For full text of R- phrases: see section 16.

2.1.2 The most important adverse effects

2.1.2.1 The most important adverse physicochemical effects:

Not applicable.

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2.1.2.2 The most important adverse human health effects:

Harmful if swallowed.
Irritating to eyes.
Limited evidence of a carcinogenic effect.

2.1.2.3 The most important adverse environmental effects:

Not applicable

2.2 label elements

Hazard Pictograms:



Signal Word(S):

Warning

Hazard Statement:

H302: Harmful if swallowed.

H319: Causes serious eye irritation.

H351: Suspected of causing cancer(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary Statement:

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P281: Use personal protective equipment as required.

P264Wash Hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313: If eye irritation persists: Get medical advice/attention.

P308 + P313: IF exposed or concerned: Get medical advice/attention.

P405: Store locked up.

P501: Dispose of contents/container to local/state/international regulations.

2.3 Other hazards

Not available (PBT,vPvB, Substance is an endocrine disruptor etc.)

3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Nitritotriacetic Trisodium	N/A	5064-31-3	225-768-6	99%

4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

4.1.2 In case of skin contact:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get

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medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

4.1.3 In case of eyes contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

4.1.4 In case of ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation. Suspected of causing cancer.

4.3 Indication of any immediate medical attention and special treatment needed

If eye irritation, get medical advice/attention.

5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

Not considered to be a fire hazard and an explosion hazard.

5.3 Advice for fire-fighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

Remove all sources of ignition. Ventilate area of leak or spill.

6.1.2 For emergency responders:

Wear appropriate personal protective equipment as specified in section 8.

6.2 Environmental Precautions:

Avoid disposing directly into the aquatic environment without any operations. Cover with damp absorbent (inert material, sand or soil).

6.3 Methods for Containment and Cleaning up:

Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

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 information on disposal.

6.5 Additional information:

Hold for waste disposal.

Ventilate area and wash spill site after material pickup is complete.

7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

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Handle in well ventilated areas. Eliminate all sources of ignition, and do not generate flames or sparks. Take precautionary measures against static discharges.

7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Keep in a tightly closed light-resistant container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances.

7.3 Specific end use(s):

Not applicable.

8 Exposure control/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: Not listed.

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values: Not available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection Use chemical safety goggles to prevent skin exposure.

Hand protection Wear appropriate gloves to prevent skin exposure.

Body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection A NOISE/MSHA jointly approved respirator is advised in the absence of proper environmental controls.

Thermal hazards Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Handling according to local regulations, Federal and official regulations.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Crystalline powder
Colour:	White
Odour:	Odorless
Odour threshold:	Not available
pH:	2.3 (saturated aqueous solution).
Melting point/range (°C):	230 - 225°C (437-446°F)
Boiling point/range (°C) :	Not available
Flash point (°C) :	Not available
Evaporation rate:	Not applicable
Flammability (solid, gas);	Not flammable
Ignition temperature (°C) :	Not determined
Upper/lower flammability/explosive limits:	Not determined
Vapour pressure (20°C) :	0.00003 @ 25°C (77°F) (Estimated)
Vapour density:	Not applicable
Relative Density (25°C):	> 1 @ 20°C
Bulk density (kg/m ³) :	Not determined
Water solubility (g/l) at 20°C :	Slightly soluble in water.

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n-Octanol/Water (log Po/w) :	Not available
Auto-ignition temperature:	Not determined
Decomposition temperature:	230 - 225°C (437-446°F)
Viscosity, dynamic (mPa s) :	Not determined
Explosive properties:	Not determined
Oxidising properties:	Not applicable

9.2. Other information:

Fat solubility(solvent-oil to be specified) etc:	Not available
Surface tension:	Not available
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available

10 Stability and reactivity

10.1 Reactivity:

The substance is stable under normal storage and handling conditions.

10.2 Chemical stability:

Under normal conditions, the product is stable. No hazardous reaction when handled and stored according to provisions.
Hazardous reactions are not known.

10.3 Possibility of hazardous reactions:

Under normal conditions, not hazardous reactions will occur.

10.4 Conditions to avoid:

Heat, flames, ignition sources and incompatibles.

10.5 Incompatible materials:

Strong bases, strong oxidizing agents, aluminum, copper.

10.6 Hazardous decomposition products:

Burning may produce carbon monoxide, carbon dioxide, nitrogen oxides.

11 Toxicological information

11.1 Toxicokinetics, metabolism and distribution

Non-human toxicological data: Not available

Method: Not available

Dosis: Not available

Routes of administration: Not available

Results: Not available

Absorption: Not available

Distribution: Not available

Metabolism: Not available

Excretion: Not available

11.2 Information on toxicological effects

Acute toxicity:

LD50(Oral, Rat): 1100 mg/kg

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LD50(Skin, Rabbit):	No data available
LD50(Inhalation, Rat):	Not available
Skin corrosion/Irritation:	Not classified
Serious eye damage/irritation:	Causes serious eye irritation.
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
reproductive toxicity:	Not classified
STOT- single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

12 Ecological information

Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
LC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	96h	Algae	OECD 201	N/A	N/A

Persistence and degradability:

When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material may leach into groundwater. When released into water, this material is expected to readily biodegrade. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition.

Bioaccumulative potential:

Not available.

Mobility in soil:

Not available.

Results of PBT&vPvB assessment:

Not applicable.

Other adverse effects:

Not applicable.

13 Disposal considerations

13.1 Waste treatment methods

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

13.2 Product / Packaging disposal:

If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

14 Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number:	Not regulated	Not regulated	Not regulated
UN Proper shipping name:	Not regulated	Not regulated	Not regulated

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Transport hazard Class:	Not regulated	Not regulated	Not regulated
Packaging group:	Not regulated	Not regulated	Not regulated
Environmental hazards:	Not regulated	Not regulated	Not regulated
Special precautions for user:	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated	Not regulated	Not regulated

15 Regulation information

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

Relevant information regarding authorization: Not applicable.
Relevant information regarding restriction: Not applicable.
Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.
Other National regulations: Not applicable
Chemical Safety Assessment has been carried out? YES NO

16 Other information

16.1 Indication of changes Version 1.1 Amended by EU No 453/2010

16.2 Relevant R- phrases (number and full text):

R22: Harmful if swallowed
R36: Causes serious eye irritation
R40: Suspected of causing cancer(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

16.3 Training instructions:

Not applicable.

16.4 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.5 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.