

SAFETY DATA SHEET

Preparation Date: 5/20/2014

Revision Date: 5/20/2014

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: N2923
Product Name: NITRILOTRIACETIC ACID TRISODIUM SALT

Other means of identification

Synonyms: Acetic acid, nitrilotri-, trisodium salt
N,N-Bis(carboxymethyl)glycine trisodium salt
Nitrilotriacetic acid, trisodium salt
Trisodium nitrilotriacetate
Trisodium nitrilotriacetic acid
Glycine, N,N-bis(carboxymethyl)-, trisodium salt

CAS #: 5064-31-3
RTECS # MB840000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Chelating agent.
Uses advised against No information available

Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Regina Wachenheim (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2

Label elements

Warning

Hazard statements

Harmful if swallowed
Causes serious eye irritation
Suspected of causing cancer



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear eye/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Nitriлотriacetic Acid Trisodium Salt 5064-31-3	5064-31-3	100	*

4. FIRST AID MEASURES

First aid measures

General Advice:

Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126). First aider needs to protect himself. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

4. FIRST AID MEASURES

Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.
Eye Contact:	Flush eye with water for 15 minutes. Get medical attention.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Harmful if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms Irritating to eyes. Nausea. Vomiting.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO₂). Water spray mist or foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon monoxide; Carbon dioxide; Sodium oxides; Nitrogen oxides

Specific hazards: May be combustible at high temperatures. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Avoid dust formation.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling**Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities**Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents. Bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**National occupational exposure limits****United States**

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Nitrilotriacetic Acid Trisodium Salt - 5064-31-3	None	None	None	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Nitrilotriacetic Acid Trisodium Salt - 5064-31-3	None	None	None	None

Australia and Mexico

Components	Australia	Mexico
Nitrilotriacetic Acid Trisodium Salt 5064-31-3	None	None

Appropriate engineering controls**Engineering measures to reduce exposure:**

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles.
Skin and body protection:	Long sleeved clothing. Chemical resistant apron. Gloves.
Respiratory protection:	Wear respirator with dust filter..
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.	Appearance: Powder.	Color: White. Off-white.
Odor: No information available	Taste No information available	Formula: C6-H6-N-Na3-O6
Molecular/Formula weight: 257.09	Flash point (°C): > 100	Flashpoint (°C/°F): >100 °C/>212 °F
Flash Point Tested according to: Not applicable	Lower Explosion Limit (%): No information available	Upper Explosion Limit (%): No information available
Autoignition Temperature (°C/°F): > 200 °C/> 392 °F	pH: No information available	Melting point/range(°C/°F): 300 °C/572 °F
Boiling point/range(°C/°F): No information available	Decomposition temperature(°C/°F): No information available	Specific gravity: No information available
Density (g/cm³): 1.77 @ 20 °C	Bulk density: No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): -2.62	Viscosity: No information available
Miscibility: No information available	Solubility: Soluble in Water Solubility in Water: 640 g.L @ 20 °C	

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents
Reacts with bases

Chemical stability

Stability: Stable at normal conditions

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Avoid dust formation. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Incompatible materials.

Incompatible Materials: Oxidizing agents. Bases.

Hazardous decomposition products: Carbon monoxide. Carbon dioxide. Sodium oxides. Nitrogen oxides (NOx).

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Toxicity

Component Information

Nitrilotriacetic Acid Trisodium Salt - 5064-31-3

LD50/oral/rat = 920 mg/kg Oral LD50 Rat (LOLI; EU Commission IUCLID dataset)
1100 mg/kg (RTECS)

LD50/oral/mouse = 681 mg/kg

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = >5 mg/L Inhalation LC50 Rat 4 h

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = 750 mg/kg Oral LD50 Monkey
>5000 mg/kg Oral LD50 Dog

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 920mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = 681mg/kg

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = > 5mg/l (4-hr.)

LC50/Inhalation/mouse

Product code: N2923

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ACID TRISODIUM SALT

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VALUE-Vapor = No information available
 VALUE - Gas = No information available
 VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation.
Eye Contact: Causes eye irritation.
Inhalation May cause irritation of respiratory tract.
Ingestion Harmful if swallowed. Ingestion may cause nausea, vomiting.
Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Prolonged or repeated ingestion may affect the kidneys. Prolonged or repeated ingestion may affect the bladder. Prolonged or repeated ingestion may affect the blood (changes in red blood cell count). Prolonged or repeated ingestion may affect the liver (change in liver weight).
Sensitization: No information available
Mutagenic Effects: No information available
Carcinogenic effects: Possibly carcinogenic to humans.

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Nitilotriacetic Acid Trisodium Salt	Not listed	Group 2B - Monograph 73 [1999] Monograph 48 [1990] evaluated as a group	Not listed	Present	Not listed	Not listed

*IARC (International Agency for Research on Cancer)
 Group 2B - Possibly Carcinogenic to Humans*

Reproductive toxicity No data is available
Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available
STOT - repeated exposure No information available
Target Organs: No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Nitriлотriacetic Acid Trisodium Salt - 5064-31-3

Freshwater Fish Species Data: 175 - 225 mg/L LC50 *Lepomis macrochirus* 96 h static 1
560 - 1000 mg/L LC50 *Oryzias latipes* 96 h 1
560 - 1000 mg/L LC50 *Oryzias latipes* 96 h semi-static 1
560 - 1000 mg/L LC50 *Poecilia reticulata* 96 h 1
560 - 1000 mg/L LC50 *Poecilia reticulata* 96 h semi-static 1
72 - 133 mg/L LC50 *Oncorhynchus mykiss* 96 h static 1
93 - 170 mg/L LC50 *Pimephales promelas* 96 h flow-through 1
114 mg/L LC50 *Pimephales promelas* 96 h 1
252 mg/L LC50 *Lepomis macrochirus* 96 h 1
470 mg/L LC50 *Pimephales promelas* 96 h static 1
Water Flea Data: 560 - 1000 mg/L LC50 *Daphnia magna* 48 h

Persistence and degradability: Not inherently biodegradable

Bioaccumulative potential: Does not bioaccumulate.

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Nitriлотriacetic Acid Trisodium Salt	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: Not applicable
Packing Group: None
Marine Pollutant: No data available
ERG No: No information available
DOT RQ (lbs): No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

14. TRANSPORT INFORMATION

ADR

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant No information available
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Classification Code: No information available
Description: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Nitriлотriacetic Acid Trisodium Salt</i>	Present	Present KE-25937	Present	Present (2)-1277	Present	Present	Present 225-768-6

U.S. Regulations

Nitrilotriacetic Acid Trisodium Salt

Massachusetts RTK: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Nitrilotriacetic Acid Trisodium Salt	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Nitrilotriacetic Acid Trisodium Salt	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Nitrilotriacetic Acid Trisodium Salt	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

D2A Very toxic materials

E Corrosive material

Nitrilotriacetic Acid Trisodium Salt

D2A E

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
Nitrilotriacetic Acid Trisodium Salt	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Nitrilotriacetic Acid Trisodium Salt	Not listed	Not listed

EU Classification

Product code: N2923

Product name: NITRILOTRIACETIC
ACID TRISODIUM SALT

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R-phrase(s)

R22 - Harmful if swallowed.

R36 - Irritating to eyes.

R40 - Limited evidence of a carcinogenic effect

S -phrase(s)

S 2 - Keep out of the reach of children.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S46 - If swallowed, seek medical advice immediately and show this container or label.

S36/37 - Wear suitable protective clothing and gloves.

Components	Classification	Concentration Limits:	Safety Phrases
Nitriлотriacetic Acid Trisodium Salt	Xn; R22 Xi; R36 Carc.Cat.3; R40	5%<=C: Carc.Cat.3; R:40	S2 S26 S36/37 S46

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xn - Harmful.

Xi - Irritant.

Xn



Xi

**16. OTHER INFORMATION**

16. OTHER INFORMATION

NFPA	HMIS	Personal Protective Equipment
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Health Hazard	1
Fire Hazard	1
Reactivity	0



See Section 8.

Preparation Date: 5/20/2014
Revision Date: 5/20/2014
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Material Safety Data Sheet