

# **Nitrilotriacetic Acid**

### **SECTION 1. IDENTIFICATION**

Product Identifier Nitrilotriacetic Acid

Other Means of NTA trisodium salt, Sodium nitrilotriacetate

Identification

Product Code(s) NI9110

Product Family Organic solid

**Recommended Use** Laboratory and industrial use.

Restrictions on Use None known.

Supplier Identifier Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995

Emergency Phone No. CANUTEC CANADA, 613-996-6666, 24 Hours

**SDS No.** 0935

## **SECTION 2. HAZARD IDENTIFICATION**

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

#### Classification

Acute toxicity (Oral) - Category 4; Serious eye damage - Category 2; Carcinogenicity - Category 2

#### **Label Elements**





Signal Word: Warning

Hazard Statement(s):

Harmful if swallowed.

Causes serious eye irritation.

Suspected of causing cancer.

Precautionary Statement(s):

Prevention:

Obtain special instructions before use.

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

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

Wash hands thoroughly after handling.

Response:

If SWALLOWED: Call a POISON CENTRE/doctor/ if you feel unwell.

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Rinse mouth.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

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If eye irritation persists: Get medical advice/attention.

Storage:

Store locked up.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

### **Other Hazards**

Harmful to aquatic life.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Substance:

Chemical Name	CAS No.	%	Other Identifiers
Trisodium nitrilotriacetate	5064-31-3	92 - 94	NTA trisodium salt, Sodium nitrilotriacetate

### **SECTION 4. FIRST-AID MEASURES**

#### **First-aid Measures**

### Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. Avoid mouth-to-mouth contact by using a barrier device. Get immediate medical advice or attention.

#### **Skin Contact**

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Immediately call a Poison Centre or doctor.

#### **Eve Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

## Ingestion

Rinse mouth with water. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Immediately call a Poison Centre or doctor.

#### **First-aid Comments**

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

#### Most Important Symptoms and Effects, Acute and Delayed

None known.

### **Immediate Medical Attention and Special Treatment**

#### **Special Instructions**

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Use any means suitable for extinguishing surrounding fire.

## **Unsuitable Extinguishing Media**

None known.

### **Specific Hazards Arising from the Product**

Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; corrosive,

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flammable ammonia; corrosive, oxidizing nitrogen oxides.

### Special Protective Equipment and Precautions for Fire-fighters

Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate downwind locations. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

#### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway.

### Methods and Materials for Containment and Cleaning Up

Avoid generating dust. Collect using an approved HEPA vacuum and place in a suitable container for disposal.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Wear personal protective equipment to avoid direct contact with this chemical. Avoid generating dusts. Only use where there is adequate ventilation. Prevent accidental contact with incompatible chemicals. Keep containers tightly closed when not in use or empty.

### **Conditions for Safe Storage**

Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources, separate from incompatible materials (see Section 10: Stability and Reactivity). Store in a closed container.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

	ACGIH	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA	
Trisodium nitrilotriacetate	Not established		Not established				

## **Appropriate Engineering Controls**

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air.

### **Individual Protection Measures**

### **Eye/Face Protection**

Safety glasses with side shields are recommended to prevent eye contact. Use full face-shield and chemical safety goggles when there is potential for contact. Contact lenses should not be worn when working with this material.

#### **Skin Protection**

Wear chemical protective clothing e.g. gloves, aprons, boots.

### **Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Basic Physical and Chemical Properties**

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**Appearance** White crystalline powder.

Odour Not available
Odour Threshold Not available

**pH** ~ 11 (1% solution)

Melting Point/Freezing Point Not applicable (melting); Not available (freezing)

Initial Boiling Point/Range Not applicable
Flash Point Not applicable
Evaporation Rate Not available
Flammability (solid, gas) Will not burn.

Upper/Lower Flammability or

**Explosive Limit** 

Not applicable (upper); Not applicable (lower)

Vapour PressureNot availableVapour Density (air = 1)Not applicableRelative Density (water = 1)1.77 at 20 °C

**Solubility** Soluble (more than 10-50 g/100 mL) in water; Not available (in other liquids)

Partition Coefficient, -10.08 (estimated)

n-Octanol/Water (Log Kow)

**Auto-ignition Temperature**Not applicable **Decomposition Temperature**~ 300 °C (572 °F)

Viscosity Not applicable (kinematic); Not applicable (dynamic)

Other Information

Physical State Solid Molecular Weight 257.09

## **SECTION 10. STABILITY AND REACTIVITY**

### Reactivity

None known.

#### **Chemical Stability**

Normally stable.

## **Possibility of Hazardous Reactions**

None expected under normal conditions of storage and use.

## **Conditions to Avoid**

Excess heat. Incompatible materials.

#### **Incompatible Materials**

Strong oxidizing agents (e.g. perchloric acid), strong bases (e.g. sodium hydroxide).

### **Hazardous Decomposition Products**

Very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides. sodium Oxides.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Likely Routes of Exposure**

Inhalation; skin contact; eye contact; ingestion.

## **Acute Toxicity**

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Trisodium nitrilotriacetate	> 5 mg/L (rat) (4-hour exposure)	1100 mg/kg (rat)	Not available

### Skin Corrosion/Irritation

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No information was located.

### Serious Eye Damage/Irritation

Animal tests show very mild irritation.

### STOT (Specific Target Organ Toxicity) - Single Exposure

### Inhalation

May cause nose and throat irritation.

### Ingestion

Harmful

Causes irritation of the mouth, throat and stomach.

#### **Aspiration Hazard**

No information was located.

### STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

### Respiratory and/or Skin Sensitization

No information was located.

### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Trisodium nitrilotriacetate	Group 2B	Not designated	Not Listed	Not Listed

Key to Abbreviations

Group 2B = Possibly carcinogenic to humans.

### **Reproductive Toxicity**

## **Development of Offspring**

Not known to harm the unborn child.

### **Sexual Function and Fertility**

Not known to cause effects on sexual function or fertility.

#### Effects on or via Lactation

No information was located.

### **Germ Cell Mutagenicity**

Not known to be a mutagen.

### **Interactive Effects**

No information was located.

## **SECTION 12. ECOLOGICAL INFORMATION**

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

## **SECTION 13. DISPOSAL CONSIDERATIONS**

#### **Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations.

### SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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### **SECTION 15. REGULATORY INFORMATION**

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Listed on the DSL.

**USA** 

Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

## **SECTION 16. OTHER INFORMATION**

Phone No.

Phone Preparation

Pate of Last Revision

Alphachem Limited
(905)-821-2995

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References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). Ascend

Performance Materials Operations LLC database.

**Disclaimer** This document is offered only as a guide in the safe handling of the above product, and has

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