# MATERIAL SAFETY DATA SHEET

## LidoChem, Inc.

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**Hazlet, NJ 07730**  
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**Fax**: (732) 264 2751  
**email**: info@lidochem.com

## LidoQuest Na₂ EDTA

### SECTION I - General Information And Chemical Product Identification

<table>
<thead>
<tr>
<th>Trade Name:</th>
<th>LidoQuest Na₂ EDTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name:</td>
<td>Disodium EDTA</td>
</tr>
<tr>
<td>Chemical Formula:</td>
<td>C₈H₈N₂Na₂O₆·2H₂O</td>
</tr>
<tr>
<td>Chemical Family:</td>
<td>Amino carboxylic Acid Salt</td>
</tr>
<tr>
<td>Synonyms:</td>
<td>EDTA Disodium, Disodium Salt of Ethylenediaminetetraacetic Acid</td>
</tr>
<tr>
<td>CAS#:</td>
<td>139-33-3</td>
</tr>
<tr>
<td>D.O.T. Shipping Name:</td>
<td>Disodium Salt of Ethylendiaminetetraacetic Acid</td>
</tr>
</tbody>
</table>

### SECTION II - Composition/information On Ingredients

<table>
<thead>
<tr>
<th>CAS#:</th>
<th>Common Name:</th>
<th>ACGIH/PPM</th>
<th>OSHA/PPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>139-33-3</td>
<td>Disodium EDTA</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>TWA</td>
<td>STEL</td>
<td>PEL</td>
<td>% by Wt</td>
</tr>
<tr>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>15467-20-6</td>
<td>Disodium NTA</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>TWA</td>
<td>STEL</td>
<td>PEL</td>
<td>% by Wt</td>
</tr>
<tr>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

### SECTION III - Hazard(s) Identification

**Route(s) of Entry:** Inhalation, Ingestion and Dermal.

### Emergency Overview

- Irritating to skin and eye and respiratory tract.
- White, free-flowing powder, odorless
- Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing.
- Product is not flammable or reactive.

### Potential Health Effects:

Nitritolriacetic acid (NTA) and/or its salts are classified by NTP and IARC as suspect carcinogens (Class 2B) based on finding of urinary tract tumors in rats in mice in chronic feeding studies. Based on the doses and exposure conditions required to cause tumors in animals and the low concentration of NTA or its salts present, we do not believe exposure to this product under normal working conditions poses a human cancer risk.

Eyes: May cause slight temporary irritation to the eye. Corneal injury is unlikely.

Skin: Prolonged exposure to skin may cause irritation or burns. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.
**SECTION IV - First Aid Information**

**Ingestion:**

Give several glasses of water.  **Never give anything to eat or drink to someone who is unconscious, having convulsions, or unable to swallow.**  Do Not Induce Vomiting.  If vomiting occurs, keep head below hips to reduce risk of aspiration.  Give fluids again.  Seek medical attention.

**Eyes:**

Flush eyes with large quantities of running water for a minimum of 15 minutes.  If victim is wearing contact lenses, remove them.  Hold eyelids apart during the flushing to ensure rinsing of entire surface of the eye and lids with water.  DO NOT let victim rub eye(s).  Do not attempt to neutralize with chemical agents.  Oils/ointments should not be used at this time.  Get medical attention if eye irritation occurs.

**Skin:**

Immediately wash with soap and water for a minimum of 15 minutes.  Wash clothing before reuse and discard footwear which cannot be cleaned.  Get immediate medical attention if irritation occurs.

**Inhalation:**

Remove to fresh air.  If breathing becomes difficult, oxygen may be given, preferably with a physician's advice.  If not breathing, give artificial respiration.  Get medical attention.

**SECTION V - Fire And Explosion Data**

**NFPA Hazard Ratings:**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = minimal</td>
<td>1 = slight</td>
<td>2 = moderate</td>
<td>3 = serious</td>
</tr>
<tr>
<td>Health:</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Flash Point:**  N/A

**Methods Used:**  N/A

**Flammable Limits:**  N/A

**LeL:**  N/A

**Uel:**  N/A

**Autoignition Temp:**  N/A

**Extinguisher Media**

This product is noncombustible.  If involved in a fire, extinguishing media suitable for surrounding materials should be used.

For Chemical Emergencies Call CHEMTREC - Day or Night - at 800 424 9300.
### Special Fire Fighting Procedures
As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate nonessential personnel from the fire area. Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing.

### Unusual Fire and Explosion Hazards
Not considered a fire hazard. When involved in a fire, does not contribute any unusual hazards.

### Hazardous Combustion Products:
Burning may produce oxides of carbon, nitrogen or sulfur.

### Emergency Response Guidebook Information:

| Emergency Information | 171 |

### Section VI- Accidental Release Measures

#### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Consult with environmental regulatory agencies for acceptable procedures of disposal. Stop source of spill. Sweep up spilled solid material, being careful not to create dust. Return sweeping to stock or, if contaminated, place into a chemical waste container for disposal.

### Section VII- Handling and Storage
#### Handling and Storage
Good housekeeping and controlling of dusts are necessary for safe handling of product. Do not store in aluminum, carbon steel, copper, copper alloys, zinc or nickel containers. Store between 9 and 120°F.
Contains nitrilotriacetic acid or its salts as a byproduct, which has been found to causes cancer in test animals. In accordance with good industrial practice, handle with due care and avoid unnecessary personal contact. For industrial use only. Isolate from strong oxidizing agents.

### Section VIII - Exposure Control and Personal Protection
#### Skin Protection
Skin contact with this product should be minimized through the use of suitable protective clothing and gloves selected with regard for use condition exposure potential.

#### Respiratory Protection
When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the latest OSHA standard (29 CFR 1910.134) and/or ANSI Z88.2 recommendations.

#### Eye Protection
Eye/face protection requirements vary depending upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be used for the particular use intended for this material. Use chemical safety glasses with side shields or splash proof goggles and face shield to prevent eye/face contact. Emergency eye wash must be readily accessible to work area.
Other Protection:
Minimize breathing dust. Avoid prolonged or repeated breathing of dust and contact with skin. Remove contaminated clothing; launder before reuse. Cleanse skin thoroughly after contact, before meals and end of work period.

Ventilation Limits:
Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: local exhaust ventilation at the point of generation.

Exposure Limits
Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting OSHA requirements. The following limits (ACGIH, OSHA and other) apply to this material, where, if indicated, S=skin and C=ceiling limit: ACGH TLV/TWA PARTICULATES NOT OTHERWISE CLASSIFIED: 10 mg/cubic meter (Inhalables)
ACGH TLV/TWA PARTICULATES NOT OTHERWISE CLASSIFIED: 3 mg/cubic meter (Respirables)

Hygienic Practices:
All food and smoking materials should be kept in a separate area away from the storage/use location. Eating, drinking and smoking should be prohibited in areas where there is a potential for significant exposure to this material. Before eating, drinking or smoking, hands and face should be thoroughly washed.

Section IX - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>61 lbs./cu ft.</td>
</tr>
<tr>
<td>Vapor Pressure(mm/hg)</td>
<td>&lt;0.1 mmHg</td>
</tr>
<tr>
<td>Vapor Density(air=1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Reactivity in Water</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble 10g/100g @25°C</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>White odorless powder</td>
</tr>
<tr>
<td>pH</td>
<td>4.3 - 5.0 (5% solution)</td>
</tr>
</tbody>
</table>

Section X - Stability and Reactivity

Stability:
This product is stable at ambient temperatures and atmospheric pressures. It is not self-reactive and is not sensitive to physical impact.

Conditions to Avoid:
None
### Incompatible Materials:
Flammable hydrogen is formed in the presence of aluminum. Avoid contact with aluminum. This product is incompatible with strong oxidizers.

### Hazardous Decomposition Products:
Hazardous decomposition products may include and are not limited to ammonia.

### Polymerization Conditions To Avoid:
Will not occur.

### Section XI - Toxicological Information
#### Eye Effects:
(Rabbits) not an irritant. It is expected that this product would be minimally irritating to eyes based on tests with similar products.

#### Skin Effects:
Chronic dermal exposure effects for this product are not known.

#### Dermal Toxicity:
Dermal toxicity data is not available. However, it is not considered to be irritating based on tests with chemically similar products.

#### Inhalation Effects:
Inhalation toxicity data is not available. Chronic inhalation exposure effects are not known.

#### Sensitization:
Not established.

#### Ingestion Effects:
Single does oral toxicity is considered to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury: swallowing amounts larger than that may cause injury. LD50 rats = 2000 mg/kg.

#### Carcinogenicity/Mutagenicity:
NTP has listed nitrilotriacetic acid and its salts to cause cancer in experimental animals. IARC has classified nitrilotriacetic acid and its salts as possibly carcinogenic to humans (Group 2B). Under criteria of the OSHA Hazard Communication Standard, nitrilotriacetic and its salts would be considered as possibly carcinogenic. This product did not cause cancer in laboratory animals. Most data indicates that EDTA is not carcinogenic.

#### Reproductive Effects:
EDTA/sodium salts reported to cause birth defects in laboratory animals only at exaggerated doses that were toxic to the mother. This is likely associated with zinc deficiency due to chelation. Exposures have no effect on the mother should have no effect on the fetus.
Neurotoxicity:
Not established.

Target Organs:
No toxicologic effects were observed in laboratory animals fed this material.

Additional Toxicological Information:
None

Section XII- Ecological Information

Biodegradability: Not evaluated
Ecotoxicity: Bluegill LC50 > 1,000 mg/l (96 HR)
Biological Oxygen Demand(BOD5): < 0.01 g/g
Chemical Oxygen Demand: 0.50 g/g
Activated Sludge Respiration Inhibition Test: Not evaluated

Additional Ecological Information:
Practically non toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/l in most sensitive species).

SECTION XIII - Disposal Considerations

Waste Disposal Methods:
In unused condition, this product is not considered to be a RCRA defined hazardous waste by characteristics/listings. It is the responsibility of the waste generator to evaluate whether his wastes are hazardous by characteristic/listing. Dispose in accordance with all local, state and federal regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented incomplete, inaccurate or otherwise inappropriate.

Container Disposal Information:
Containers should be cleaned of residual product before disposal. Empty containers should be disposed of in accordance with all applicable laws and regulations.

Section XIV - Transport Information

Proper Shipping Name: Disodium Salt of Ethylenediaminetetraacetic Acid

D. O. T. Hazard Class: Not regulated by D.O.T. UN: N/A
Label Requirement: None RQ: N/A
Placard: None
Packing Group: N/A CAS: 139-33-3
## Section XV - Regulatory Information

### State Right To Know Laws:

The following ingredients are disclosed for compliance with State Right to Know Laws:

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>State RTK</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SARA Title III Hazard Classes Sections 311/312:

Not to have met any criteria under SARA 311/312

### OSHA Status:

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910,1200.

### SARA Title III Hazard Classes Section 302 - EXTREMELY HAZARDOUS SUBSTANCES:

This product does not contain ingredients listed in Appendix A and B as Extremely Hazardous substances.

### TSCA Status:

Listed/Reportable

### SARA Section 313:

This product contains the following toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act:

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Cercla, 40 Cfr 117, 302:

This product does not contain ingredients specified in the List of Extremely Hazardous Substances.

### Cercla Listed Substances Are:

None

### SARA Superfund Section 110:

This product does not contain ingredients listed as hazardous substances on the Priority List of CERCLA Hazardous substances.

### California Proposition 65:

This product contains a chemical (or chemicals) known to the State of California to cause cancer.

### Michigan Critical Materials:

This product does not contain ingredients listed on the Michigan Critical Materials Register.
MATERIAL SAFETY DATA SHEET

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email: info@lidochem.com

LidoQuest Na₂ EDTA

<table>
<thead>
<tr>
<th>MSDS#</th>
<th>1231</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>Na2EDTASIC</td>
</tr>
<tr>
<td>Date Printed</td>
<td>10/08/10</td>
</tr>
<tr>
<td>Review/Revision Date</td>
<td>05/03/10</td>
</tr>
</tbody>
</table>

Page: 8 of 8

CAA: None known
CWA: None known
RCRA: Not considered a hazardous waste.
Canada CEPA: All components are listed on the Canadian DSL
Canada WHMIS: Controlled product, Class D2B eye or skin irritant

SECTION XVI - Other Information

NOTICE: OSHA STANDARD 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a Hazard Communication Program including training, labeling, Material Safety Data Sheets, and access to written records. We request that you, and it is your legal duty, make all information in this Material Safety Data Sheet available to your employees.

Key Legend Information:

N/A: Not Available
N/R: Not Rated
ACGI: American Conference of Govt'ntal Industrial Hygienists
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
IARC: International Agency for Research on Cancer
SARA Title III: Superfund Amendments and Reauthorization Act
CERCLA: Comprehensive Response, Compensation and Liability Act
TSCA: Toxic Substance Control Act

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This Material Safety Data Sheet was prepared to comply with OSHA Hazard Communication standard. (29 CFR 1910.1200). This supersedes any previous information. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by LidoChem, Inc as to the effects of such use or the results to be obtained, nor does LidoChem, Inc. assume any liability arising out of use, by others, of the products referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist because of applicable laws or government regulations. All LidoChem Inc. MSDS's are reviewed every three years or sooner if necessary. Please check the Review Date on Page 1 for most current version. Please request a new MSDS from LidoChem, Inc. if the date is older than 3 years.

For Chemical Emergencies Call CHEMTREC - Day or Night - at 800 424 9300.