LidoQuest® Na2 EDTA

SAFETY DATA SHEET

SECTION 1 - General Information And Chemical Product Identification

Trade Name: LidoQuest® Na2 EDTA
Chemical Name: Disodium EDTA
Application/Uses: Chelating Agent For Industrial cleaning and used as a micronutrient for agriculture
Restrictions: NONE SPECIFIED

Distributor Information
LidoChem, Inc. 20 Village Court, Hazlet, NJ 07730, Phone: (732) 888 8000
Fax: (732) 264 2751 * email: info@lidochem.com

Emergency phone #: CHEMTREC - Day or Night - at 800 424 9300

SECTION 2 - Hazard(s) Identification

Classification of the substance or mixture (GHS-US)
Acute Toxicity Cat 4(Oral) H302
Skin Irritant Cat 2 H315
Eye Irritant Cat 2A H319
Respiratory tract irritation - STOT SE Cat 3 H335

Physical Hazards
None

Hazard Statement
H302: Harmful if swallowed
H315: Causes skin irritation
H319: Causes serious eye irritation
H332: Harmful if inhaled
H335: May cause respiratory irritation

OSHA Defined Hazards
This product does NOT contain any products considered hazardous under the Federal OSHA HazCom. Standard 29 CFR 1910.1200.

HNOC - Hazards Not Otherwise Classified
No other hazards classified

GHS Precautionary Statements - Prevention, Response, Storage, Disposal
P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P264: Wash exposed skin thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only outdoors or in a well-ventilated area
P280: Wear protective gloves/protective clothing/eye protection/face protection
P302+352: IF ON SKIN: Wash with soap and water
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P332+313: If skin irritation occurs: Get medical advice/attention
P362: Take off contaminated clothing and wash before reuse
P403+233: Store in a well-ventilated place. Keep container tightly closed
P405: Store locked up
P501: Dispose of contents/container to comply with local, state and federal regulations

SECTION 3 Composition/Information On Ingredients

Molecular Weight: 372.24
Chemical Formula: C_{10}H_{14}N_{2}Na_{2}O_{8} 2H_{2}O

CAS#: 6381-92-6
Common Name/Synonyms:
Disodium EDTA

% by Wt.
100

For Chemical Emergencies Call CHEMTREC - Day or Night - at 800 424 9300.
SECTION 4 - First Aid Information

Description of first aid measures

General Advice:
Consult a physician. Show this safety data sheet to the doctor in attendance.

If Inhaled:
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.

In Case Of Skin Contact:
Remove contaminated clothing and equipment. Wash all affected areas with plenty of soap and water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Wash contaminated clothing and shoes before reuse. Get medical advice if irritation occurs.

In Case Of Eye Contact:
Flush eyes with large quantities of running water for a minimum of 15 minutes. If present and easy to do, remove contact lenses. 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 used at this time. Get medical attention if eye irritation occurs.

If Swallowed:
Give several glasses of water. If vomiting occurs, keep head below hips to reduce risk of aspiration. Give fluids again. Seek medical attention if health effects occur. Never give anything to eat or drink to someone who is unconscious, having convulsions, or unable to swallow. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed:

ACUTE: At high dust concentrations, irritation of eyes, skin, nose and upper respiratory tract by chemical or mechanical action may occur.

Skin: May cause irritation
Eye: Irritation and possible damage
Inhalation: Dust may cause irritation of respiratory tract and symptoms of bronchitis may result.

Ingestion: May result in irritation of mouth, throat and stomach, may result in serious health hazard.

Indication of any immediate medical attention and special treatment needed:
Treat symptomatically. No specific product related symptoms are known.

SECTION 5 - Fire And Explosion Data

Suitable Extinguishing Media:
Use water spray, alcohol-resistant foam, dry chemical or Polyvalent foam. ABC powder. Carbon dioxide.
If involved in a fire, extinguishing media suitable for surrounding materials should be used.

UnSuitable Extinguishing Media:
No unsuitable extinguishing media known.

Specific Hazards arising from the chemical:
Carbon oxides, nitrogen oxides (NOx), Sodium oxides

Special protective equipment and precautions for fire-fighters:
Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing.

Fire-fighting equipment/instructions
As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate nonessential personnel from the fire area.

Specific Methods
If involved in a fire, extinguishing media suitable for surrounding materials should be used.
Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Avoid formation of dust and aerosols. Provide adequate exhaust ventilation at places where dust is formed. Keep container tightly closed. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration. Provide appropriate exhaust ventilation at places where dust is formed.

Environmental Precautions:

Stop source of spill if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and Materials for Containment and Clean Up:

Sweep up spilled solid material, being careful not to create dust. Keep in a suitable, closed container for disposal. Consult with environmental regulatory agencies for acceptable procedures of disposal. See Section 13 for disposal information.

Section 7 - Handling and Storage

Precautions for safe handling:

Avoid formation of dust and aerosols. Provide adequate exhaust ventilation at places where dust is from. Keep container tightly closed. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage:

Good housekeeping and controlling of dusts are necessary for safe handling of product. Store between 9 and 120°F in a dry and well ventilated place. In accordance with good industrial practice, handle with due care and avoid unnecessary personal contact. For industrial use only.

Incompatibilities:

No information found.

Section 8 - Exposure Control and Personal Protection

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Identity:</th>
<th>CAS #:</th>
<th>Exposure Limit Values</th>
<th>SOURCE</th>
<th>OSHA/PPM</th>
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<tbody>
<tr>
<td>Disodium EDTA</td>
<td>6381-92-6</td>
<td>TWA</td>
<td>ACGIH Threshold Limit Values</td>
<td>none</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>ACGIH Threshold Limit Values</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACGIH Threshold Limit Values</td>
<td></td>
</tr>
</tbody>
</table>

Exposure Limits and Appropriate Engineering Controls:

Contains no substances with occupations exposure limit values.

Individual Protection Measures, (Personal Protective Equipment):

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.

Skin Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
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.

Respiratory Protection
Respiratory protection is not required. Where protection from nuisance levels of dust are desired, use type N95 dust masks. 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.

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.

Hygienic Practices:
Minimize breathing dust. Avoid prolonged or repeated breathing of dust and contact with skin. All food and smoking materials should be kept in a separate area away from the storage/use location. Before eating, drinking or smoking, hands and face should be thoroughly washed. Facilities storing or using this material should be equipped with an eyewash and safety shower.

### Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance And Odor</td>
<td>White odorless powder</td>
</tr>
<tr>
<td>pH</td>
<td>4.0 - 5.0</td>
</tr>
<tr>
<td>Melting Point</td>
<td>248°C 478°F</td>
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<tr>
<td>Freezing Point</td>
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<tr>
<td>Boiling Point</td>
<td>No Data Available</td>
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<tr>
<td>Flash Point</td>
<td>&gt;100°C 212°F</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No Data Available</td>
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<tr>
<td>Solubilities</td>
<td>Soluble 10g/100g @25°C</td>
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<tr>
<td>Specific Gravity</td>
<td>61 lbs./cu ft.</td>
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<tr>
<td>Bulk Density</td>
<td>.64</td>
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<tr>
<td>Other Information</td>
<td>Hygroscopic. Substance has acid reaction</td>
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<td>Flammable Limits</td>
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<tr>
<td>UEL</td>
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</tr>
<tr>
<td>LEL</td>
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<tr>
<td>Vapor Pressure(mm/hg)</td>
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</tr>
<tr>
<td>Vapor Density(air=1)</td>
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</tr>
<tr>
<td>Autoignition Temp</td>
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</tr>
<tr>
<td>Decomposition Temp</td>
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</tr>
<tr>
<td>Reactivity In Water</td>
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</tr>
<tr>
<td>Viscosity</td>
<td>No Data Available</td>
</tr>
</tbody>
</table>

### Section 10 - Stability and Reactivity

Chemical Stability and Reactivity:
This product is stable at ambient temperatures and atmospheric pressures. Reacts on exposure to water (moisture) with(some) metals: release of highly flammable gases/vapours (hydrogen). Product is hygroscopic.

Possible Hazardous Reactions:
It is not self-reactive and is not sensitive to physical impact.

Conditions to Avoid:
On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide-carbon dioxide)

Incompatible Materials:
No information found.

Hazardous Decomposition Products:
No Data Available
Section 11- Toxicological Information

Information On The Likely Routes Of Exposure: Inhalation, Ingestion and Dermal.

Symptoms Related To The Physical, Chemical And Toxicological Effects:

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

Skin Effects:
Causes skin irritation - pH: 4-6 5% solution at 25°C

Dermal Toxicity:
Dermal toxicity data is not available. However, it is not considered to be irritating based on tests with chemically similar products. >5000 mg/kg (Rabbit)

Eye Effects:
Causes eye irritation - pH: 4-6 5% solution at 25°C

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. AFTER ABSORPTION OF HIGH QUANTITIES: Gastrointestinal complaints. Change in the haemogramme/blood composition

Sensitization:
Not classified.

Carcinogenicity/Mutagenicity:
This product did not cause cancer in laboratory animals. Most data indicates that EDTA is not mutagenic. Minimal effects are reported likely due to trace metal deficiencies from chelation by EDTA.

Reproductive Effects:
No reproductive data available. STOT No data available

Neurotoxicity:
The neurotoxic effects of this product are not known.

Target Organs:
Target organ effects of this material are not available.

Additional Toxicological Information:
No other toxic effects for this product are known.

Section 12- Ecological Information

Ecotoxicity: LC50 - Leuciscus idus (Golden orfe) - > 500 mg/l - 96 h
Degradability: Readily biodegradable.
Bioaccumulative potential: No data available.
Mobility in the Soil: No data available.

Additional Adverse effect on environment:
LC50 - Leuciscus idus (Golden orfe) - > 500 mg/l - 96 h An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.
SECTION 13 - Disposal Considerations

Disposal Instructions and Regulations:
Offer surplus and non-recyclable solutions to a licensed disposal company. Dispose of as unused product as contaminated packaging. 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.

Hazardous Waste Code: Not considered a hazardous waste

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. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations.

Section 14 - Transport Information

US DOT, IATA, IMO, ADR:
Proper Shipping Name: Disodium Ethylene Diamine Tetraacetate Dihydrate

D. O. T. Hazard Class: Not regulated by D.O.T.  UN #: N/A
Label Requirement: None  RQ: N/A
Placard: None  CAS: 6381-92-6
Packing Group: N/A  ERG Book Information: 171
Environment Hazards: No  Marine Pollutant: No
Special Precautions: No  IATA: Not regulated as dangerous goods.

Section 15 - Regulatory Information

US Federal - OSHA Status:
This product does NOT contain any products considered hazardous under the Federal OSHA HazCom. Standard 29 CFR 1910.1200.

TSCA Status:
Not Listed/Non-reportable  SEE SECTION 16 FOR FURTHER INFO.

U.S. SARA Reporting Requirements:

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.

SARA Title III Hazard Classes Sections 311/312:
N/Ap

SARA Section 313 Toxic Chemicals:
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:

| CAS# | Chemical Name: This material does NOT contain any chemical components with known CAS numbers that exceed the threshold reporting levels. |

SARA Superfund Section 110:
This product does NOT contain ingredients listed as hazardous substances on the Priority List of CERCLA Hazardous substances.

CERCLA, 40 CFR 117, 302:
This product does NOT contain ingredients specified in the List of Extremely Hazardous Substances.

CERCLA listed substances are:
None

For Chemical Emergencies Call CHEMTREC - Day or Night - at 800 424 9300.  DATE PRINTED: 1/18/2017
This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act.

No chemicals in product are listed a Hazardous Substances, Priority Pollutants or Toxic Pollutants under the CWA.

Not considered a hazardous waste.

This product does NOT contain ingredients listed on the Michigan Critical Materials Register.

All components are listed on the Canadian DSL.

Controlled product, Class D2B  eye or skin irritant

Updated 1/14/17 to GHS standards.

CAS # 6381-92-6 can be described by the CAS # 139-33-3  CAS# 6381-92-6 is not on the TSCA Inventory because it is a dihydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).  CAS# 139-33-3 is listed on the TSCA inventory.
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/Ap: Not Applicable
N/R: Not Rated
ACGI: American Conference of Govr’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
CAA: Clean Air Act
RCRA: Resource Conservation Recovery Act
IATA: International Air Transport Association Shipping Info.
DSL: Domestic Substance List (Canada)
ND: Not Determined
NDA: No Data Available
TLV: Threshold Limit Value
TWA: Time Weighted Average
NTP: National Toxicology Program
TSCA: Toxic Substance Control Act
CERCLA: Comprehensive Response, Compensation and Liability Act
CWA: Clean Water Act
IMO: International Maritime Organization Shipping Info.
WHMIS: Workplace Hazardous Materials Information System

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 Safety Data Sheet was prepared to comply with OSHA Hazard Communication standard. (29 CFR 1910.1200 HazCom 2012). 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. SDS'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 SDS from LidoChem, Inc. if the date is older than 3 years.