1. Identification

Product Name: Ethylenediaminetetraacetic acid, 0.5M soln., Molecular Biology Grade, Ultrapure, Thermo Scientific

Cat No.: J15694

Synonyms: No information available

Recommended Use: Laboratory chemicals.

Uses advised against: Food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company: Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.alfa.com

Emergency Telephone Number
During normal business hours
(Monday-Friday, 8am-7pm EST), call (800) 343-0660.
After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

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

Specific target organ toxicity - (repeated exposure) Category 2

Label Elements

Signal Word
Warning

Hazard Statements
May cause damage to organs through prolonged or repeated exposure
Precautionary Statements

Prevention
Do not breathe dust/fume/gas/mist/vapors/spray

Response
Get medical attention/advice if you feel unwell

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
None identified

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>81.90</td>
</tr>
<tr>
<td>Ethylenediaminetetraacetic acid, disodium salt dihydrate</td>
<td>6381-92-6</td>
<td>18.00</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

4. First-aid measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact
Wash off immediately with plenty of water for at least 15 minutes.

Inhalation
Move to fresh air.

Ingestion
Do NOT induce vomiting.

Most important symptoms and effects
No information available.

Notes to Physician
Treat symptomatically

5. Fire-fighting measures

Unsuitable Extinguishing Media
No information available

Flash Point
No information available

Method -
No information available

Autoignition Temperature
No information available

Explosion Limits
Upper - No data available
Lower - No data available

Sensitivity to Mechanical Impact
No information available

Sensitivity to Static Discharge
No information available
Specific Hazards Arising from the Chemical
Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
None known

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

NFPA

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### 6. Accidental release measures

**Personal Precautions:** Ensure adequate ventilation. Use personal protective equipment as required.

**Environmental Precautions:** Should not be released into the environment.

**Methods for Containment and Clean Up:** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

### 7. Handling and storage

**Handling:** Ensure adequate ventilation.

**Storage:** Keep containers tightly closed in a dry, cool and well-ventilated place.

### 8. Exposure controls / personal protection

**Exposure Guidelines:** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
<th>Mexico OEL (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>Ceiling: 2 mg/m³</td>
<td>(Vacated) Ceiling: 2 mg/m³</td>
<td>IDLH: 10 mg/m³</td>
<td>Ceiling: 2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>Ceiling: 2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**Engineering Measures:** Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

- **Eye/face Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

- **Skin and body protection:** Wear appropriate protective gloves and clothing to prevent skin exposure.

- **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.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.

### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Appearance</th>
<th>Odor</th>
<th>Odor Threshold</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>No information available</td>
<td>Odorless</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>
Stability and reactivity

Reactive Hazard
None known, based on information available

Stability
Stable under normal conditions.

Conditions to Avoid
Incompatible products.

Incompatible Materials
Strong oxidizing agents

Hazardous Decomposition Products
None under normal use conditions

Hazardous Polymerization
Hazardous polymerization does not occur.

Hazardous Reactions
None under normal processing.

Toxicological information

Acute Toxicity

Product Information

Oral LD50
Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Dermal LD50
Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Mist LC50
Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.

Vapor LC50
Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component Information

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>-</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>LD50 = 325 mg/kg (Rat)</td>
<td>LD50 = 1350 mg/kg (Rabbit)</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Toxicologically Synergistic Products
No information available

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

Irritation
No information available

Sensitization
No information available

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Ethylenediaminetetraacetic acid</td>
<td>6381-92-6</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>
12. Ecological information

Ecotoxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Freshwater Algae</th>
<th>Freshwater Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>-</td>
<td>LC50: = 45.4 mg/L, 96h static (Oncorhynchus mykiss)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated
TDG Not regulated
IATA Not regulated
IMDG/IMO Not regulated

15. Regulatory information

United States of America Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>TSCA</th>
<th>TSCA Inventory notification - Active/Inactive</th>
<th>TSCA - EPA Regulatory Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>X</td>
<td>ACTIVE</td>
<td>-</td>
</tr>
<tr>
<td>Ethylenediaminetetraacetic acid, disodium salt dihydrate</td>
<td>6381-92-6</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>X</td>
<td>ACTIVE</td>
<td>-</td>
</tr>
</tbody>
</table>
**Legend:**

- **TSCA** - Toxic Substances Control Act, (40 CFR Part 710)
- X - Listed
- '-' - Not Listed

- **TSCA 12(b)** - Notices of Export

**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>X</td>
<td>-</td>
<td>231-791-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>KE-35400</td>
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<tr>
<td>Ethylenediaminetetraacetic acid, disodium salt dihydrate</td>
<td>6381-92-6</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>KE-13660</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>X</td>
<td>-</td>
<td>215-185-5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>KE-31487</td>
</tr>
</tbody>
</table>

**U.S. Federal Regulations**

- **SARA 313**
  - Not applicable

- **SARA 311/312 Hazard Categories**
  - See section 2 for more information

**CWA (Clean Water Act)**

<table>
<thead>
<tr>
<th>Component</th>
<th>CWA - Hazardous Substances</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>X</td>
<td>1000 lb</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

- **Clean Air Act**
  - Not applicable

- **OSHA - Occupational Safety and Health Administration**
  - Not applicable

**CERCLA**

<table>
<thead>
<tr>
<th>Component</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA EHS RQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1000 lb</td>
<td>-</td>
</tr>
</tbody>
</table>

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Component</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**U.S. Department of Transportation**

- Reportable Quantity (RQ): N
- DOT Marine Pollutant: N
- DOT Severe Marine Pollutant: N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

- Mexico - Grade
  - No information available
16. Other information

Prepared By
Health, Safety and Environmental Department
Email: tech@alfa.com
www.alfa.com

Revision Date 31-Oct-2019
Print Date 31-Oct-2019
Revision Summary SDS authoring systems update, replaces ChemGes SDS No. 1,501.

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the
date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,
transportation, disposal and release and is not to be considered a warranty or quality specification. The information
relates only to the specific material designated and may not be valid for such material used in combination with any other
materials or in any process, unless specified in the text.

End of SDS