NEMESIS
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03/19/2020  Revision date: 03/19/2020  Version: 1.0

SECTION 1: Identification

1.1. Identification
Product form : Mixture
Product name : NEMESIS
Product code : 7076; EPA REG NO 1839-83-72026

1.2. Recommended use and restrictions on use
Use of the substance/mixture : Disinfectant

1.3. Supplier
Nuance Solutions
900 E 103rd Street
Suite D
Chicago, IL - United States
T 773-785-2300
regulatory@nuancesolutions.com - www.nuancesolutions.com

1.4. Emergency telephone number
Emergency number : 1-800-535-5053
For Chemical Emergency Call ... 24hr/day 7days/week
Within USA and Canada: …
Outside USA and Canada: …
(collect calls accepted)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS US classification
Skin corrosion/irritation Category 1 H314 Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1 H318 Causes serious eye damage
Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements
GHS US labeling
Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
Precautionary statements (GHS US) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a poison center or doctor
P321 - Specific treatment (see supplemental first aid instruction on this label)
P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification
Other hazards not contributing to the classification : None under normal conditions.
SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TETRA SODIUM EDTA-39%</td>
<td>(CAS-No.) 64-02-8</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell. If medical advice is needed, have product container or label at hand. Never give anything by mouth to an unconscious person.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Wash skin with plenty of water. Soap may be used. Take victim to a doctor if irritation persists.

First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion : If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting because of corrosive effects. Rinse mouth out with water. Give nothing or a little water to drink.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms : Causes serious eye damage. Causes severe skin burns. Harmful if swallowed.

Symptoms/effects after inhalation : None under normal use.

Symptoms/effects after skin contact : Caustic burns/corrosion of the skin.

Symptoms/effects after eye contact : Causes serious eye burns.


4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Adapt extinguishing media to the environment for surrounding fires. Dry chemical, CO2, or water spray or regular foam.

5.2. Specific hazards arising from the chemical

Fire hazard : Non-flammable.

Explosion hazard : No direct explosion hazard.

Reactivity in case of fire : In case of fire: possible release of toxic/corrosive gases/vapours.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Do not enter fire area without proper protective equipment, including respiratory protection. Exercise caution when fighting any chemical fire. Evacuate area. Cool tanks/drums with water spray/remove them into safety. Contain the extinguishing fluids by bunding. Take account of environmentally hazardous firefighting water.

Protection during firefighting : Wear recommended personal protective equipment. Do not attempt to take action without suitable protective equipment. Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Do not handle until all safety precautions have been read and understood. Absorb spillage to prevent material-damage. Avoid contact with skin and eyes. Clean up any spills as soon as possible, using an absorbent material to collect it. May be harmful to aquatic organisms, to flora, to soil organisms.

6.1.1. For non-emergency personnel


6.1.2. For emergency responders


Emergency procedures: Cover spill with non-combustible material, e.g.: sand/earth. Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment. Do not allow product to spread into the environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment: Absorb spilled material with sand or earth. Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Consult an expert on waste disposal or treatment.

Methods for cleaning up: Absorb remaining liquid with sand or inert absorbent and remove to safe place. Absorb spillage to prevent material-damage. Carefully collect the spill/leftovers.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed: Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling: Comply with the legal requirements. Avoid contact with skin and eyes. Clean contaminated clothing.

Hygiene measures: Observe normal hygiene standards.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.

Storage conditions: Keep container closed when not in use. Keep only in original container. Store in a dry place. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| NEMESIS | No additional information available |
| TETRA SODIUM EDTA-39% (64-02-8) | No additional information available |

8.2. Appropriate engineering controls

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Keep in a cool place.

Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure. Wear recommended personal protective equipment.
Skin and body protection:
Protective clothing, Corrosion-proof clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>clear Blue</td>
</tr>
<tr>
<td>Odor</td>
<td>Lemon odour</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>12 - 13</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
No additional information available

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
No additional information available

10.5. Incompatible materials
No additional information available
10.6. Hazardous decomposition products
No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

TETRA SODIUM EDTA-39% (64-02-8)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>3030 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>3030 mg/kg body weight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes severe skin burns and eye damage. pH: 12 - 13

Serious eye damage/irritation: Causes serious eye damage. pH: 12 - 13

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified

STOT-repeated exposure: Not classified

TETRA SODIUM EDTA-39% (64-02-8)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOAEC (inhalation, rat, dust/mist/fume, 90 days)</td>
<td>0.015 mg/l air Animal: rat, Animal sex: female, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)</td>
</tr>
<tr>
<td>NOAEL (oral, rat, 90 days)</td>
<td>&gt;= 500 mg/kg body weight Animal: rat</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
</tbody>
</table>

Aspiration hazard: Not classified

Viscosity, kinematic: No data available

Potential Adverse human health effects and symptoms: Causes serious eye damage. Causes severe skin burns. Harmful if swallowed.

Symptoms/effects after inhalation: None under normal use.

Symptoms/effects after skin contact: Caustic burns/corrosion of the skin.

Symptoms/effects after eye contact: Causes serious eye burns.


SECTION 12: Ecological information

12.1. Toxicity

TETRA SODIUM EDTA-39% (64-02-8)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>121 mg/l (96 h, Lepomis macrochirus, Literature study, Soft water)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>&gt; 100 mg/l 96 hr Pimephales promelas</td>
</tr>
<tr>
<td>LC50 other aquatic organisms 2</td>
<td>157 - 2070 96 hr Lepomis macrochirus</td>
</tr>
<tr>
<td>LOEC (chronic)</td>
<td>50 mg/l Test organisms (species): Daphnia magna Duration: ‘21 d’</td>
</tr>
<tr>
<td>NOEC (chronic)</td>
<td>25 mg/l Test organisms (species): Daphnia magna Duration: ‘21 d’</td>
</tr>
<tr>
<td>NOEC chronic fish</td>
<td>&gt;= 25.7 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: ‘35 d’</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

TETRA SODIUM EDTA-39% (64-02-8)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
<td>Not readily biodegradable in water.</td>
</tr>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
<td>&lt; 0.002 g O₂/g substance</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>TETRA SODIUM EDTA-39% (64-02-8)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical oxygen demand (COD)</td>
<td>0.54 - 0.58 g O₂/g substance</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>TETRA SODIUM EDTA-39% (64-02-8)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
<td>-2.6</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Not bioaccumulative</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

No additional information available

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>TETRA SODIUM EDTA-39% (64-02-8)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
<td></td>
</tr>
</tbody>
</table>

FIFRA Labelling

| EPA Registration Number | 1839-83 |

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

FIFRA Signal Word

Caution

FIFRA Precautionary Statement

Keep out of reach of children.

15.2. International regulations

15.3. US State regulations

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/19/2020

Full text of H-phrases:

| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |

SDS US (GHS HazCom 2012)
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.