1 Identification

- Product identifier
  - Trade name: Versenate Hardness Titr. Soln. (1 ml = 4000 mg/L Ca & Mg)
  - Article number: 205-17-1

- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: OFI Testing Equipment Inc.
    11302 Steeplecrest Dr.
    Houston, TX 77065
    (877) 837-8683
  - Information department: techservices@ofite.com
  - Emergency telephone number:
    INFOTRAC USA - CANADA: 1-800-535-5053
    INTERNATIONAL: 1-352-323-3500

2 Hazard(s) identification

- Classification of the substance or mixture
  The product is not classified according to the Globally Harmonized System (GHS).

- Label elements
  - GHS label elements: Not Applicable
  - Hazard pictograms: Not Applicable
  - Signal word: Not Applicable
  - Hazard statements: Not Applicable
  - Precautionary statements
    Wear protective gloves / eye protection.
    If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
    IF ON SKIN: Wash with plenty of water.
    Store in accordance with local/regional/national/international regulations.
    Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
  - NFPA ratings (scale 0 - 4)
    Health = 0
    Fire = 0
    Reactivity = 0
  - HMIS-ratings (scale 0 - 4)
    HEALTH 1
    FIRE 0
    REACTIVITY 0

- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 6381-92-6 Ethylenedinitrilotetraacetic acid, disodium salt</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table of Nonhazardous Ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 7732-18-5 Water</td>
</tr>
</tbody>
</table>

4 First-aid measures

- Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose of contaminated material as waste according to item 13.
- Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.
- Protective Action Criteria for Chemicals
  - PAC-1:
    - CAS: 6381-92-6 Ethylenedinitrilotetraacetic acid, disodium salt | 30 mg/m³ |
  - PAC-2:
    - CAS: 6381-92-6 Ethylenedinitrilotetraacetic acid, disodium salt | 330 mg/m³ |
7 Handling and storage

- **Handling:**
  - **Precautions for safe handling** No special measures required.
  - **Information about protection against explosions and fires:** No special measures required.

- **Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:** No special requirements.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** None.
  - **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    The usual precautionary measures for handling chemicals should be followed.
  - **Breathing equipment:** Not required.
  - **Protection of hands:**
    - **Protective gloves**
      The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
      Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - **Material of gloves**
    The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - **Penetration time of glove material**
    The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **Eye protection:** Goggles recommended during refilling.
<table>
<thead>
<tr>
<th>9 Physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>· Information on basic physical and chemical properties</strong></td>
</tr>
<tr>
<td><strong>· General Information</strong></td>
</tr>
<tr>
<td><strong>· Appearance:</strong></td>
</tr>
<tr>
<td>Form:</td>
</tr>
<tr>
<td>Color:</td>
</tr>
<tr>
<td>Odor:</td>
</tr>
<tr>
<td>Odor threshold:</td>
</tr>
<tr>
<td>pH-value:</td>
</tr>
</tbody>
</table>

| **· Change in condition** |
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | Undetermined. |

| **· Flash point:** | Not applicable. |
| **· Flammability (solid, gaseous):** | Not applicable. |
| **· Ignition temperature:** |
| Decomposition temperature: | Not determined. |
| **· Auto igniting:** | Product is not selfigniting. |

| **· Danger of explosion:** | Product does not present an explosion hazard. |
| **· Explosion limits:** |
| Lower: | Not determined. |
| Upper: | Not determined. |
| **· Vapor pressure at 20 °C (68 °F):** | 23 hPa (17 mm Hg) |
| **· Density:** | Not determined. |
| **· Relative density** | Not determined. |
| **· Vapor density** | Not determined. |
| **· Evaporation rate** | Not determined. |

| **· Solubility in / Miscibility with Water:** | Not miscible or difficult to mix. |
| **· Partition coefficient (n-octanol/water):** | Not determined. |

| **· Viscosity:** |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |

| **· Solvent content:** |
| Organic solvents: | 0.0 % |
| Water: | 96.3 % |
| VOC content: | 0.0 g/l / 0.00 lb/gl |
| **· Other information** | No further relevant information available. |
10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    - ATE (Acute Toxicity Estimates)
      - Oral LD50: 120968 mg/kg (rat)
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
    - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    - The product is not subject to classification according to internally approved calculation methods for preparations:
      - When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    - None of the ingredients is listed.
  - NTP (National Toxicology Program)
    - None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    - None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Behavior in environmental systems:
    - Bioaccumulative potential: No further relevant information available.
    - Mobility in soil: No further relevant information available.
  - Additional ecological information:
    - General notes: Not known to be hazardous to water.
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
Trade name: Versenate Hardness Titr. Soln. (1ml = 4000 mg/L Ca & Mg)

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods
  · Recommendation: Smaller quantities can be disposed of with household waste.

· Uncleaned packagings:
  · Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number  
  · DOT, ADN, IMDG, IATA  Not regulated

· UN proper shipping name  
  · DOT, ADN, IATA  Not regulated  
  · IMDG  Not Regulated

· Transport hazard class(es)
  · DOT, ADN, IMDG, IATA  Not regulated

· Packing group
  · DOT, IMDG, IATA  Not regulated

· Environmental hazards:
  · Marine pollutant: No

· Special precautions for user  Not applicable.

· Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  Not applicable.

· UN "Model Regulation":  Not regulated

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture
  · Sara  
    · Section 355 (extremely hazardous substances):
      None of the ingredients is listed.

  · Section 313 (Specific toxic chemical listings):
    None of the ingredients is listed.

  · TSCA (Toxic Substances Control Act):
    None of the ingredients is listed.

  · Proposition 65

· Chemicals known to cause cancer:
  None of the ingredients is listed.
Trade name: Versenate Hardness Titr. Soln. (1ml = 4000 mg/L Ca & Mg)

- **Chemicals known to cause reproductive toxicity for females:**
  None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**
  None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**
  None of the ingredients is listed.

- **Carcinogenic categories**
  - EPA (Environmental Protection Agency)
    None of the ingredients is listed.
  - TLV (Threshold Limit Value established by ACGIH)
    None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.

- **GHS label elements** Not Applicable
  - **Hazard pictograms** Not Applicable
  - **Signal word** Not Applicable
  - **Hazard statements** Not Applicable
  - **Precautionary statements**
    Wear protective gloves / eye protection.
    If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
    IF ON SKIN: Wash with plenty of water.
    Store in accordance with local/regional/national/international regulations.
    Dispose of contents/container in accordance with local/regional/national/international regulations.
  - **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Environment protection department.
- **Contact:**
- **Date of preparation / last revision**
  Creation date for SDS 05-19-2014 LS
  Revision 0.1, 05-01-2015: revised to correct emergency contact and information dept contact. STN
  Revision 0.2, 07-05-2017: Reviewed SDS. STN
  07/05/2017 /
- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
Trade name: Versenate Hardness Titr.
Soln. (1ml = 4000 mg/L Ca & Mg)

LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit