1. Identification

- Product identifier

  - Trade name: Versenate Hardness Titrating Solution
    \[ \text{W/AF} \text{ 1 ml} = 400 \text{ mg/L Ca & Mg} \]

- Article number: 205-11-M-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

  Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:

  - NFPA ratings (scale 0 - 4)

    Health = 2
    Fire = 1
    Reactivity = 0

  - HMIS-ratings (scale 0 - 4)

    HEALTH Health = 2
    FIRE Fire = 1
    REACTIVITY 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.

- Dangerous components:

  | CAS: 57-55-6 1,2 Propanediol (Propylene Glycol) | 35.809% |

(Contd. on page 2)
Trade name: Versenate Hardness Titrating Solution  
W/AF 1 ml = 400 mg/L Ca & Mg

- Table of Nonhazardous Ingredients

<table>
<thead>
<tr>
<th>CAS</th>
<th>Ingredient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>6381-92-6</td>
<td>Ethylenedinitrilotetraacetic acid, disodium salt</td>
<td>0.368%</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>63.824%</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: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - 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: Use fire fighting measures that suit the environment.
  - 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 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          | 1,2 Propanediol (Propylene Glycol) | 30 mg/m³ |
    |--------------|------------------------------------|----------|
    | 57-55-6      | Ethylenedinitrilotetraacetic acid, disodium salt | 30 mg/m³ |
  - PAC-2:
    | CAS          | 1,2 Propanediol (Propylene Glycol) | 1,300 mg/m³ |
    |--------------|------------------------------------|------------|
    | 57-55-6      | Ethylenedinitrilotetraacetic acid, disodium salt | 330 mg/m³ |
  - PAC-3:
    | CAS          | 1,2 Propanediol (Propylene Glycol) | 7,900 mg/m³ |
    |--------------|------------------------------------|------------|
Trade name: Versenate Hardness Titrating Solution  
W/AF 1 ml = 400 mg/L Ca & Mg

CAS: 6381-92-6 Ethylenedinitrilotetraacetic acid, disodium salt  
2,000 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:
    - CAS: 57-55-6 1,2 Propanediol (Propylene Glycol)
      - TWA Short-term value: 10 mg/m³
      - WEEL Long-term value: 10 mg/m³

- 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:
      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.
    - Body protection: Protective work clothing
### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - **Form:** Liquid
    - **Color:** Clear
  - **Odor:** Odorless
  - **Odor threshold:** Not determined.
  - **pH-value:** Not determined.
- **Change in condition**
  - **Melting point/Melting range:** Undetermined.
  - **Boiling point/Boiling range:** Undetermined.
- **Flash point:** 101 °C (214 °F)
- **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 at 20 °C (68 °F):** 1.03001 g/cm³ (8.595 lbs/gal)
  - **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:** 63.8 %
  - **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.
11 Toxicological information

· 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.

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 Titrating Solution
W/AF 1 ml = 400 mg/L Ca & Mg

13 Disposal considerations

- Other adverse effects No further relevant information available.

- 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
  - Class 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 MARPOL73/78 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):
    CAS: 57-55-6 1,2 Propanediol (Propylene Glycol)

  - Proposition 65
    - Chemicals known to cause cancer:
      None of the ingredients is listed.
Trade name: Versenate Hardness Titrating Solution
W/AF 1 ml = 400 mg/L Ca & Mg

<table>
<thead>
<tr>
<th>Chemicals known to cause reproductive toxicity for females:</th>
<th>None of the ingredients is listed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemicals known to cause reproductive toxicity for males:</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>Chemicals known to cause developmental toxicity:</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>Carcinogenic categories</td>
<td></td>
</tr>
<tr>
<td>EPA (Environmental Protection Agency)</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>TLV (Threshold Limit Value established by ACGIH)</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>NIOSH-Ca (National Institute for Occupational Safety and Health)</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>· GHS label elements</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>· Hazard pictograms</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>· Signal word</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>· Hazard statements</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>· Precautionary statements</td>
<td></td>
</tr>
<tr>
<td>Dispose of contents/container in accordance with local/regional/national/international regulations.</td>
<td></td>
</tr>
<tr>
<td>Chemical safety assessment: A Chemical Safety Assessment has not been carried out.</td>
<td></td>
</tr>
</tbody>
</table>

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
Revision 0.1, 05-01-2015: revised to correct emergency contact and information dept contact. STN
Creation date for SDS 07-15-2014 LS
Revision 0.2, 07-03-2017: Reviewed SDS. STN
07/03/2017 - /

· 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)
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
Trade name: Versenate Hardness Titrating Solution
W/AF 1 ml = 400 mg/L Ca & Mg

PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

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