1 Identification

- **Product identifier**
  - **Trade name:** Versenate Hardness
    - Titrating Solution 1ml=2 EPM
  - **Article number:** 205-00

- **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
    - Health = 1
    - **FIRE:** 0
    - Fire = 0
    - **REACTIVITY:** 0
    - Reactivity = 0

- **Other hazards**
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.

(Contd. on page 2)
3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components: Not Applicable

| CAS: 6381-92-6 | Ethylenedinitrilotetraacetic acid, disodium salt | 0.037% |
| CAS: 7732-18-5 | Water | 99.963% |

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: Dilute with plenty of water.
- 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: 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.
9 Physical and chemical properties

- **Appearance**: Liquid
- **Color**: Colorless
- **Odor**: Odorless
- **Odor threshold**: Not determined.
- **pH-value**: Not determined.
- **Change in condition**
  - **Melting point/Melting range**: Undetermined.
  - **Boiling point/Boiling range**: 100 °C (212 °F)
- **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 at 20 °C (68 °F)**: 0.99982 g/cm³ (8.343 lbs/gal)
- **Relative density**: Not determined.
- **Vapor density**: Not determined.
- **Evaporation rate**: Not determined.
- **Solubility in / Miscibility with**
  - **Water**: Fully miscible.
- **Partition coefficient (n-octanol/water)**: Not determined.
- **Viscosity**
  - **Dynamic**: Not determined.
  - **Kinematic**: Not determined.
- **Solvent content**
  - **Organic solvents**: 0.0 %
  - **Water**: 100.0 %
  - **VOC content**: 0.0 g/l / 0.00 lb/gl
- **Other information**
  - No further relevant information available.

(Contd. on page 5)
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:
  - 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: Generally not hazardous for water.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - 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.
  - Recommended cleansing agent: Water, if necessary with cleansing agents.

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: Not applicable.

- 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):
  None of the ingredients is listed.

- Proposition 65

- Chemicals known to cause cancer:
  None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for females:
  None of the ingredients is listed.
Trade name: Versenate Hardness
Titrating Solution 1ml=2 EPM

- 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
    Revision 0.1, 5-01-2015: revised to correct emergency contact and technical contact information. STN
    Creation date for SDS 04-30-14 LS
    Revision 0.2, 07-10-2017: Reviewed SDS. STN 07/10/2017 / -

- 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)
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  NIOSH: National Institute for Occupational Safety
**Trade name:** Versenate Hardness  
**Titrating Solution 1ml=2 EPM**

OSHA: Occupational Safety & Health  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit