1 Identification

· Product identifier
  · Trade name: Hydrogen Peroxide 3% Solution
  · Article number: 200-10

· 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

  GHS05 Corrosion

  Eye Dam. 1 H318 Causes serious eye damage.

· Label elements
  · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
  · Hazard pictograms

  GHS05

· Signal word Danger

· Hazard-determining components of labeling:
  Hydrogen Peroxide Solution

· Hazard statements
  Causes serious eye damage.

· Precautionary statements
  Wear eye protection / face protection.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Immediately call a POISON CENTER/doctor.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:
· NFPA ratings (scale 0 - 4)

  Health = 1
  Fire = 0
  Reactivity = 0

(Contd. on page 2)
Trade name: Hydrogen Peroxide 3% Solution

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.

- Dangerous components:
  - CAS: 7722-84-1 Hydrogen Peroxide Solution 9.577%

- Table of Nonhazardous Ingredients
  - CAS: 7732-18-5 Water 90.423%

4 First-aid measures

- Description of first aid measures
  - 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. 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
  - Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
  - Dilute with plenty of water.
  - Do not allow to enter sewers/surface or ground water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
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: 7722-84-1 Hydrogen Peroxide Solution | 10 ppm |
| PAC-2: | CAS: 7722-84-1 Hydrogen Peroxide Solution | 50 ppm |
| PAC-3: | CAS: 7722-84-1 Hydrogen Peroxide Solution | 100 ppm |

Handling and storage

Handling:
Precautions for safe handling No special precautions are necessary if used correctly.
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: Keep receptacle tightly sealed.
Specific end use(s) No further relevant information available.

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:

<table>
<thead>
<tr>
<th>CAS: 7722-84-1 Hydrogen Peroxide Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>REL</td>
</tr>
<tr>
<td>TLV</td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
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:

Tightly sealed goggles

Body protection: Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:
  Form: 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.
Trade name: Hydrogen Peroxide
3% Solution

- Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)
- Density at 20 °C (68 °F): 1.013 g/cm³ (8.453 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: 90.4 %
  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 5221 mg/kg
    Inhalative LC50/4 h 115 mg/l

    CAS: 7722-84-1 Hydrogen Peroxide Solution
    Oral LD50 500 mg/kg (ATE)
    Inhalative LC50/4 h 11 mg/l (ATE)
- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: Strong irritant with the danger of severe eye injury.
  - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    The product shows the following dangers according to internally approved calculation methods for preparations:

    (Contd. on page 6)
**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:
      - Water hazard class 1 (Self-assessment): slightly hazardous for water
      - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
      - Must not reach bodies of water or drainage ditch undiluted or unneutralized.
    - 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:
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **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, IMDG, IATA: Not regulated

- **Transport hazard class(es)**
  - DOT, ADN, IMDG, IATA: Not regulated
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances):
      CAS: 7722-84-1 Hydrogen Peroxide Solution
    - Section 313 (Specific toxic chemical listings):
      None of the ingredients is listed.
    - TSCA (Toxic Substances Control Act):
      CAS: 7722-84-1 Hydrogen Peroxide Solution
    - 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.
      - 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)
      CAS: 7722-84-1 Hydrogen Peroxide Solution A3
    - NIOSH-Ca (National Institute for Occupational Safety and Health)
      None of the ingredients is listed.
- GHS label elements
  - The product is classified and labeled according to the Globally Harmonized System (GHS).
- GHS hazard pictograms
  - GHS05 (Contd. on page 8)
Trade name: Hydrogen Peroxide
3% Solution

- Signal word Danger
- Hazard-determining components of labeling:
  Hydrogen Peroxide Solution
- Hazard statements
  Causes serious eye damage.
- Precautionary statements
  Wear eye protection / face protection.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Immediately call a POISON CENTER/doctor.
  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 information dept. 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
  PEL: Permissible Exposure Limit
  REL: Recommended Exposure Limit
  Eye Dam. 1: Serious eye damage/eye irritation – Category 1