SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name: Zep Verdiza GL Pump
Material number: 000000000000125496
Manufacturer or supplier's details
Company: Zep Inc.
Address: 1310 Seaboard Industrial Blvd., NW
        Atlanta, GA 30318
Telephone: 404-352-1680

Emergency telephone numbers

For SDS Information: Compliance Services 1-877-428-9937
For a Medical Emergency: 877-541-2016 Toll Free - All Calls Recorded
For a Transportation Emergency: CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

<table>
<thead>
<tr>
<th>Physical state</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>green</td>
</tr>
<tr>
<td>Odour</td>
<td>mint-like, pleasant</td>
</tr>
</tbody>
</table>

GHS Classification

Oxidizing liquids: Category 1
Skin corrosion: Category 1A
Serious eye damage: Category 1

GHS Label element

Hazard pictograms:

Signal word: Danger

Hazard statements:
H271 May cause fire or explosion; strong oxidiser.
H314 Causes severe skin burns and eye damage.

Precautionary statements:

Prevention:
P210 Keep away from heat.
P220 Keep/Store away from clothing/ combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P283 Wear fire/ flame resistant/ retardant clothing.

**Response:**
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 + P310 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 or doctor/ physician.
P306 + P360 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

**Storage:**
P405 Store locked up.

**Disposal:**
P501 Dispose of contents/container in accordance with local regulation.

**Potential Health Effects**

**Carcinogenicity:**

- **IARC**
  No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

- **ACGIH**
  Confirmed animal carcinogen with unknown relevance to humans

- **OSHA**
  No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

- **NTP**
  No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Hazardous components**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Peroxide</td>
<td>7722-84-1</td>
<td>&gt;= 5 - &lt; 10</td>
</tr>
<tr>
<td>1-(1-methyl-2-propoxyethoxy)propan-2-ol</td>
<td>29911-27-1</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Alcohols, C12-16, ethoxylated</td>
<td>68551-12-2</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>
SECTION 4. FIRST AID MEASURES

General advice: Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled: If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact: Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact: Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed: Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media: High volume water jet

Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products: Carbon dioxide (CO2)
Carbon monoxide
Smoke

Specific extinguishing methods: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information: Collect contaminated fire extinguishing water separately. This
must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency procedures | Use personal protective equipment. Evacuate personnel to safe areas. |
| Environmental precautions | Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |

SECTION 7. HANDLING AND STORAGE

| Advice on safe handling | Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations. |
| Conditions for safe storage | Prevent unauthorized access. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. |
| Materials to avoid | Keep away from oxidising agents and strongly acid or alkaline materials. |

SECTION 8. EXPOSURE CONTROLS/PERSOAL PROTECTION

Components with workplace control parameters
SAFETY DATA SHEET

Zep Verdiza GL Pump

Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis
---|---|---|---|---
hydrogen peroxide | 7722-84-1 | TWA | 1 ppm | ACGIH
| | TWA | 1 ppm 1.4 mg/m3 | NIOSH REL
| | TWA | 1 ppm 1.4 mg/m3 | OSHA Z-1
| | TWA | 1 ppm 1.4 mg/m3 | OSHA P0

**Personal protective equipment**

**Respiratory protection**

- No personal respiratory protective equipment normally required.
- Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

**Hand protection**

**Remarks**

- The suitability for a specific workplace should be discussed with the producers of the protective gloves.

**Eye protection**

- Eye wash bottle with pure water
- Tightly fitting safety goggles
- Wear face-shield and protective suit for abnormal processing problems.

**Skin and body protection**

- impervious clothing
- Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Hygiene measures**

- When using do not eat or drink.
- When using do not smoke.
- Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- **Appearance**: liquid
- **Colour**: green
- **Odour**: mint-like, pleasant
- **Odour Threshold**: no data available
- **pH**: 4.5 - 5
- **Melting point/freezing point**: no data available
- **Boiling point**: 104.4 °C
- **Flash point**: > 93.3 °C
  Method: closed cup
Evaporation rate: no data available
Upper explosion limit: no data available
Lower explosion limit: no data available
Vapour pressure: no data available
Relative vapour density: no data available
Density: 1.07 g/cm³

Solubility(ies)
Water solubility: soluble in cold water
Partition coefficient: n-octanol/water: no data available
Auto-ignition temperature: not determined
Thermal decomposition: no data available

Viscosity
Viscosity, kinematic: 4.2 mm²/s (20 °C)

SECTION 10. STABILITY AND REACTIVITY
Reactivity: Stable
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: No decomposition if stored and applied as directed.
Conditions to avoid: Heat, flames and sparks.
Incompatible materials: Flammable materials
Cyanides
Oxidizing agents
Reducing agents
Hazardous decomposition products: Risk of decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION
Acute toxicity
Product:
Acute oral toxicity: Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Skin corrosion/irritation
Product:
Remarks: Extremely corrosive and destructive to tissue.

**Serious eye damage/eye irritation**

**Product:**
Remarks: May cause irreversible eye damage.

**Respiratory or skin sensitisation**
no data available

**Germ cell mutagenicity**
no data available

**Carcinogenicity**
no data available

**Reproductive toxicity**
no data available

- **hydrogen peroxide:**
- **1-(1-methyl-2-propanoxyethoxy)propan-2-ol:**
- **Alcohols, C12-16, ethoxylated:**
- **dodecyltrimethylamine oxide:**

**STOT - single exposure**
no data available

**STOT - repeated exposure**
no data available

**Aspiration toxicity**
no data available

**Further information**

**Product:**
Remarks: no data available

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**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**
no data available

**Persistence and degradability**
no data available

**Bioaccumulative potential**

**Product:**
Partition coefficient: n-octanol/water : Remarks: no data available
Components:

Mobility in soil
no data available

Other adverse effects
no data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International regulation

UNRTDG Not regulated as a dangerous good

IATA-DGR Not regulated as a dangerous good

IMDG-Code Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.
SAFETY DATA SHEET

Zep Verdiza GL Pump

Version 1.0
Revision Date 11/07/2014
Print Date 05/12/2016

National Regulations

49 CFR
Not regulated as a dangerous good

Special precautions for user
not applicable

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>orthophosphoric acid</td>
<td>7664-38-2</td>
<td>5000</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards
: Fire Hazard
: Acute Health Hazard

SARA 302
: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313
: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA On TSCA Inventory
DSL This product contains one or several components that are not on the Canadian DSL nor NDSL
AICS Not in compliance with the inventory
NZIoC Not in compliance with the inventory
PICCS Not in compliance with the inventory
IECSC Not in compliance with the inventory

Inventory Acronym and Validity Area Legend:
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)
SECTION 16. OTHER INFORMATION

Further information

NFPA:

- Flammability: 1
- Health: 3
- Instability: 0
- Ox: Special hazard.

HMIS III:

- Health: 3
- Flammability: 1
- Physical Hazard: 3

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

OSHA GHS Label Information:

- Hazard pictograms: [Image]
- Signal word: Danger
- Hazard statements: May cause fire or explosion; strong oxidiser. Causes severe skin burns and eye damage.
- Precautionary statements:
  - Prevention: Keep away from heat. Keep/Store away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Wear fire/flame resistant retardant clothing.
  - Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. 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 or doctor/physician. IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash contaminated clothing before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
- Storage: Store locked up.
- Disposal: Dispose of contents/container in accordance with local regulation.

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