SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP FLOW PRO SEPTIC, DRAIN, TOILET CARE
Material number : ZFLOW4

Manufacturer or supplier's details
Company : Zep Inc.
Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137
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

Recommended use of the chemical and restrictions on use
Recommended use : Drain and Sewer Care

Note: This product is labeled as a consumer product in accordance with the United States Consumer Product Safety Commission regulations. The warnings presented below in this Safety Data Sheet (SDS) comply with the 2012 OSHA Hazard Communication Standard (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of consumer products may differ from those required for GHS based hazard communication.

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview
Appearance : solid
Colour : No data available
Odour : like fruit

GHS Classification
Skin sensitisation : Category 1
Skin irritation : Category 2
Serious eye damage : Category 1
Reproductive toxicity : Category 2

GHS label elements
Hazard pictograms :
Signal word : Danger
Hazard statements : H315 Causes skin irritation.
Precautionary statements:

**Prevention:**
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear eye protection/ face protection.

**Response:**
- P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
- 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/doctor.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P362 Take off contaminated clothing and wash before reuse.

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

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance / Mixture:**
Mixture

**Hazardous components**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>tetrasodium ethylenediaminetetraacetate</td>
<td>64-02-8</td>
<td>&gt;= 25 - &lt; 50</td>
</tr>
<tr>
<td>sodium dodecylbenzenesulfonate</td>
<td>25155-30-0</td>
<td>&gt;= 5 - &lt; 10</td>
</tr>
<tr>
<td>Amides, coco, N-(hydroxyethyl)</td>
<td>68140-00-1</td>
<td>&gt;= 5 - &lt; 10</td>
</tr>
<tr>
<td>2-(4-tert-butylbenzyl)propionaldehyde</td>
<td>80-54-6</td>
<td>&gt;= 0.1 - &lt;= 0.3</td>
</tr>
</tbody>
</table>

The exact percentages of disclosed substances are withheld as trade secrets.

### 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.
- Consult a physician after significant exposure.

**In case of skin contact:**
- If skin irritation persists, call a physician.
- Wash off immediately with plenty of water for at least 15 minutes.
- Remove contaminated clothing and shoes.
- Wash contaminated clothing before reuse.

**In case of eye contact:**
- Small amounts splashed into eyes can cause irreversible
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.

Most important symptoms and effects, both acute and delayed

- Effects are dependent on exposure (dose, concentration, contact time).
- Effects are immediate and delayed.
- Symptoms may include irritation, redness, pain, and rash.
- Suspected of damaging fertility or the unborn child.
- Causes serious eye damage.
- Review section 2 of SDS to see all potential hazards.

Notes to physician

- Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media

- Dry chemical
- Water spray jet
- Carbon dioxide (CO2)
- Alcohol-resistant foam

 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
- Nitrogen oxides (NOx)
- Smoke
- Sulphur oxides

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.

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.  
Avoid dust formation.  
Avoid breathing dust. |
| --- | --- |
| Environmental precautions | 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 | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Sweep up or vacuum up spillage and collect in suitable container for disposal. |

### SECTION 7. HANDLING AND STORAGE

| Advice on safe handling | Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms. |
| --- | --- |
| Conditions for safe storage | 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.  
Electrical installations / working materials must comply with the technological safety standards. |
| Materials to avoid | No materials to be especially mentioned. |

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Components with workplace control parameters</th>
<th>Contains no substances with occupational exposure limit values.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering measures</td>
<td>Effective ventilation in all processing areas</td>
</tr>
<tr>
<td>Personal protective equipment</td>
<td>Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.</td>
</tr>
<tr>
<td>Hand protection</td>
<td>4 / 11</td>
</tr>
</tbody>
</table>
Material: Protective gloves
Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection: Ensure that eyewash stations and safety showers are close to the workstation location.
Tightly fitting safety goggles

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: solid

Colour: No data available
Odour: like fruit
Odour Threshold: No data available
pH: No data available
Melting point/freezing point: No data available
Boiling point: No data available
Flash point: No data available
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: No data available
Solubility(ies): soluble in cold water
Water solubility: No data available
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: not determined
Thermal decomposition: No data available
Viscosity
Viscosity, kinematic: No data available
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 : No data available

Incompatible materials : No data available

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Effects are dependent on exposure (dose, concentration, contact time).
Effects are immediate and delayed.
Symptoms may include irritation, redness, pain, and rash.

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

OSHA
No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.

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.

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : 544.3 mg/kg
Method: Calculation method

Components:

sodium dodecylbenzenesulfonate:
Acute oral toxicity : LD50 Oral Rat: 438 mg/kg
Skin corrosion/irritation
  **Product:**
  Remarks: Irritating to skin.

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

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
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: Not applicable

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.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: TDG (Canada):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL
The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list: No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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>sodium dodecylbenzenesulfonate</td>
<td>25155-30-0</td>
<td>1000</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: Respiratory or skin sensitisation
Skin corrosion or irritation
Reproductive toxicity
Serious eye damage or eye irritation

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

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

WARNING: This product can expose you to chemicals including Nitrilotriacetic acid trisodium salt monohydrate, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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

DSL
All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer’s regulatory group.

Inventory Acronym and Validity Area Legend:
TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

Further information

NFPA:  
- Flammability: 0
- Health: 3
- Instability: 0

HMIS III:
- HEALTH: 3*
- FLAMMABILITY: 0
- PHYSICAL HAZARD: 0

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

Special hazard.

OSHA - GHS Label Information:

Hazard pictograms: 

Signal word: Danger
Hazard statements: Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.
Precautionary statements:
- Prevention: Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye protection/face protection.
- Response: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. 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. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
- Disposal: Dispose of contents/container in accordance with local regulation.
We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes.

This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

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