

# SAFETY DATA SHEET

## ZEP SAFETY SENSE RECIRCULATING DETERGENT

Version 2.1

Revision Date 10/01/2023

Print Date 04/27/2025

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP SAFETY SENSE RECIRCULATING DETERGENT

Material number : 000000000000488580

#### Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE  
Emerson, GA 30137

Telephone : Compliance Services - 877-428-9937

#### Emergency telephone numbers

For SDS Information : Compliance Services - 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

#### Recommended use of the chemical and restrictions on use

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

|            |           |
|------------|-----------|
| Appearance | powder    |
| Colour     | white     |
| Odour      | odourless |

#### GHS Classification

Skin corrosion : Category 1  
Serious eye damage : Category 1  
Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

#### GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.

Precautionary statements : **Prevention:**  
P260 Do not breathe dust or mist.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.

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P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

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.

P363 Wash contaminated clothing before reuse.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

**Disposal:**

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

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

| Chemical name   | CAS-No.    | Concentration [%] |
|---|------------|-------------------|
| Sodium metasilicate (disodium salt)   | 6834-92-0  | >= 30 - < 50      |
| sodium carbonate  | 497-19-8   | >= 20 - < 30      |
| Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]- | 60864-33-7 | >= 3 - < 5        |
| tetrasodium pyrophosphate   | 7722-88-5  | >= 1 - < 3        |

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.  
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.

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Wash off immediately with plenty of water for at least 15 minutes.

If on clothes, remove clothes.

- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
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.  
Rinse immediately with plenty of water for at least 15 minutes.
- 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 immediate and delayed.  
Effects are dependent on exposure (dose, concentration, contact time).  
Symptoms may include blistering, irritation, burns, and pain.  
Causes severe skin burns and eye damage.  
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

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#### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : No hazardous combustion products are known
- 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.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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#### 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 product from entering drains.

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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 : Sweep up or vacuum up spillage and collect in suitable container for disposal.  
Keep in suitable, closed containers for disposal.

### SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid formation of respirable particles.  
Do not breathe vapours/dust.  
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.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline materials.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

| Components                | CAS-No.   | Value type<br>(Form of exposure) | Control parameters /<br>Permissible concentration | Basis     |
|---------------------------|-----------|----------------------------------|---|-----------|
| tetrasodium pyrophosphate | 7722-88-5 | TWA                              | 5 mg/m <sup>3</sup>                               | NIOSH REL |
|                           |           | TWA                              | 5 mg/m <sup>3</sup>                               | OSHA P0   |
|                           |           | PEL                              | 5 mg/m <sup>3</sup>                               | CAL PEL   |

Engineering measures : effective ventilation in all processing areas

#### Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.  
Dust safety masks are recommended when the dust concentration is more than 10 mg/m<sup>3</sup>.

Hand protection  
Material : Protective gloves

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|                          |  |
|--------------------------|--|
| Remarks                  | : The suitability for a specific workplace should be discussed with the producers of the protective gloves.  |
| Eye protection           | : Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.<br>Tightly fitting safety goggles<br>Wear face-shield and protective suit for abnormal processing problems. |
| Skin and body protection | : Dust impervious protective suit<br>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.<br>When using do not smoke.<br>Wash hands before breaks and at the end of workday.   |

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |   |
|--|---|
| Appearance                             | : powder                                |
| Colour                                 | : white                                 |
| Odour                                  | : odourless                             |
| Odour Threshold                        | : No data available                     |
| pH                                     | : 12.0 - 12.5, 1 %(as aqueous solution) |
| Boiling point                          | : Not applicable                        |
| Flash point                            | :<br>Not applicable                     |
| 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                                | : Not applicable                        |
| Solubility(ies)                        |   |
| Water solubility                       | : partly soluble                        |
| Partition coefficient: n-octanol/water | : No data available                     |
| Auto-ignition temperature              | : not determined                        |
| Thermal decomposition                  | : No data available                     |
| Viscosity                              |   |
| Viscosity, kinematic                   | : No data available                     |

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### 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.<br>Dust may form explosive mixture in air. |
| Conditions to avoid                | : No data available  |
| Incompatible materials             | : Acids  |
| Hazardous decomposition products   | : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).<br>Oxides of phosphorus     |

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Potential Health Effects

|                              |   |
|------------------------------|---|
| Aggravated Medical Condition | : None known.   |
| Symptoms of Overexposure     | : Effects are immediate and delayed.<br>Effects are dependent on exposure (dose, concentration, contact time).<br>Symptoms may include blistering, irritation, burns, and pain.<br>Causes severe skin burns and eye damage.<br>Review section 2 of SDS to see all potential hazards.<br>Treat symptomatically. Symptoms may be delayed. |

#### 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:

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Acute oral toxicity : Acute toxicity estimate : 2,345 mg/kg  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

#### **Components:**

##### **Sodium metasilicate (disodium salt):**

Acute oral toxicity : LD50 Rat: 1,153 mg/kg

##### **sodium carbonate:**

Acute oral toxicity : LD50 Oral Rat: 4,090 mg/kg

Acute inhalation toxicity : LC50 Rat: 5,750 mg/l  
Exposure time: 2 h

#### **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

#### **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 : No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues : Dispose of in accordance with local regulations.  
The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.



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### 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

| Components               | CAS-No.   | Component RQ<br>(lbs) | Calculated product RQ<br>(lbs) |
|--------------------------|-----------|-----------------------|--------------------------------|
| pentasodium triphosphate | 7758-29-4 | 5000                  | *                              |

\*: 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** : Skin corrosion or irritation  
Serious eye damage or eye irritation  
Specific target organ toxicity (single or repeated exposure)

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**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**

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:**

**DSL** All components of this product are on the Canadian DSL  
**TSCA** On TSCA Inventory

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)

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## SECTION 16. OTHER INFORMATION

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### Further information

#### NFPA:

|                 |   |
|-----------------|---|
| HEALTH          | 3 |
| FLAMMABILITY    | 1 |
| INSTABILITY     | 0 |
| SPECIAL HAZARD. |   |

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

#### HMIS III:

|                 |   |
|-----------------|---|
| HEALTH          | 3 |
| FLAMMABILITY    | 1 |
| PHYSICAL HAZARD | 0 |

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

### OSHA - GHS Label Information:

Hazard pictograms



Signal word

Hazard statements

Precautionary statements

- : **Danger:**
- : Causes severe skin burns and eye damage. May cause respiratory irritation.
- : **Prevention:** Do not breathe dust or mist. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection.
- : **Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. 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. Wash contaminated clothing before reuse.
- : **Storage:** Store in a well-ventilated place. Keep container tightly closed.
- : **Disposal:** Dispose of contents/container in accordance with local regulation.

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