

# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP RECIRCULATING DETERGENT 500LB

Material number : 000000000000036380

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

#### GHS label elements

Hazard pictograms :



Corrosion

Exclamation mark

Signal word : Danger

Hazard statements : H302 Harmful if swallowed.  
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.

# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

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

### Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

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 carbonate	497-19-8	>= 30 - < 50
tetrasodium pyrophosphate	7722-88-5	>= 10 - < 20
Sodium metasilicate (disodium salt)	6834-92-0	>= 10 - < 20
sodium benzoate	532-32-1	>= 5 - < 10
Alcohols, C9-11, ethoxylated	68439-46-3	>= 1 - < 3
Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]-	60864-33-7	>= 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

# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

	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. Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
In case of eye contact	: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. 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 unless directed to do so by a physician or poison control center. 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 blistering, irritation, burns, and pain. Symptoms may include shortness of breath, dry cough, and irritation of the nose, eyes, lips, mouth, and throat. Causes severe skin burns and eye damage. May cause respiratory irritation. 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
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 (CO <sub>2</sub> ) Carbon monoxide Sulphur oxides Smoke Phosphorus compounds

# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

- 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 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 : 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 : Store and keep away from, oxidizing agents and acids.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible	Basis
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# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

			concentration	
tetrasodium pyrophosphate	7722-88-5	TWA	5 mg/m3	NIOSH REL
		TWA	5 mg/m3	OSHA P0
		PEL	5 mg/m3	CAL PEL

**Engineering measures** : effective ventilation in all processing areas

### Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Material

Remarks

: Protective gloves

: 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.

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection

: Choose body protection according to the amount and concentration of the dangerous substance at the work place. Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.

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

: powder

Colour

: white

Odour

: odourless

Odour Threshold

: No data available

pH

: Not applicable

Melting point/freezing point

: No data available

Boiling point

: Not applicable

Flash point

:

Not applicable

Evaporation rate

: No data available

# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

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
Solubility in other solvents	: Not applicable
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	: Acids
Hazardous decomposition products	: Carbon dioxide (CO <sub>2</sub> ) Oxides of phosphorus

### 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 blistering, irritation, burns, and pain. Symptoms may include shortness of breath, dry cough, and irritation of the nose, eyes, lips, mouth, and throat.

# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

Causes severe skin burns and eye damage.  
May cause respiratory irritation.  
Review section 2 of SDS to see all potential hazards.  
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:

Acute oral toxicity : Acute toxicity estimate : 3,687 mg/kg  
Method: Calculation method

#### Components:

##### 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

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

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

##### Alcohols, C9-11, ethoxylated:

Acute oral toxicity : LD50 Oral Rat: 1,400 mg/kg

### 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

# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

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).



# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

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.

### 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.

# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

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

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

#### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute toxicity (any route of exposure)  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Specific target organ toxicity (single or repeated exposure)  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Specific target organ toxicity (single or repeated exposure)

**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

# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

### 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	0
PHYSICAL HAZARD	0

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

### OSHA - GHS Label Information:

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Harmful if swallowed. Causes severe skin burns and eye damage. May cause respiratory irritation.

Precautionary statements

: **Prevention:** Do not breathe dust or mist. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:** IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. 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.

# SAFETY DATA SHEET

## ZEP RECIRCULATING DETERGENT 500LB

Version 3.1

Revision Date 10/01/2023

Print Date 04/27/2025

**Storage:** Store in a well-ventilated place. Keep container tightly closed.

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

Version:	3.1
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