

SAFETY DATA SHEET

ZEP ZEP-O-ZYME

Version 4.0

Revision Date 09/08/2025

Print Date 09/08/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP ZEP-O-ZYME

Material number : 000000000000168209

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	brown
Odour	characteristic

GHS Classification

Respiratory sensitisation : Category 1

Combustible dust :

GHS label elements

Hazard pictograms :



Health hazard

Signal word : Danger

Hazard statements : H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May form combustible dust concentrations in air.

Precautionary statements : P233 Keep container tightly closed.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Prevention:
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P285 In case of inadequate ventilation wear respiratory

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protection.

Response:

P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

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 [%]
Subtilisin	9014-01-1	≥ 0.1 - < 0.3

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

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
Get medical attention if symptoms occur.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with soap and plenty of water.
If skin irritation persists, call a physician.
Remove contaminated clothing and shoes.
Wash contaminated clothing before re-use.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 5 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.
- Most important symptoms : Effects are dependent on exposure (dose, concentration,

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and effects, both acute and delayed

contact time).
Effects are immediate and delayed.
Symptoms may include irritation, redness, pain, and rash.
Causes eye 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.
Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
Metal oxides
Chlorine compounds

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

Further information : Standard procedure for chemical fires.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.
Remove all sources of ignition.

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.
Do not create a powder cloud by using a brush or compressed air.

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Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

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.
Dispose of rinse water in accordance with local and national regulations.
Ensure all equipment is electrically grounded before beginning transfer operations.
Take precautionary measures against static discharges.
- 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 : 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 (Form of exposure)	Control parameters / Permissible concentration	Basis
Subtilisin	9014-01-1	C	0.00006 mg/m ³	OSHA P0
		STEL	0.00006 mg/m ³	CAL PEL
		ST	0.00006 mg/m ³	NIOSH REL

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 : Protective gloves

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

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Eye protection	: Safety glasses Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.
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	: powder
Colour	: brown
Odour	: characteristic
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Boiling point	: Not applicable
Flash point	: Not applicable
Evaporation rate	: Not applicable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: Not applicable
Density	: No data available
Solubility(ies)	
Water solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: Not applicable

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Dust may form explosive mixture in air. No decomposition if stored and applied as directed.
Conditions to avoid	: Avoid dust generation May form combustible dust concentrations in air. Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

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. Causes eye 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	: LD50 Oral : 7,645 mg/kg Method: Calculation method
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LD50 Oral Rat: 3,700 mg/kg

Skin corrosion/irritation

Product:

Remarks: May irritate skin.

Serious eye damage/eye irritation

Product:

Remarks: Irritating to eyes.

Respiratory or skin sensitisation

Product:

Remarks: Not applicable

Components:

Subtilisin:

Classification: May cause sensitisation by inhalation.

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

Product:

Exposure routes: Inhalation

Target Organs: respiratory tract irritation

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 : Dispose of in accordance with local regulations. Do not dispose of waste into sewer. 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.

SECTION 14. TRANSPORT INFORMATION

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

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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

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 : Respiratory or skin sensitisation
Combustible dust

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

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WARNING: This product can expose you to chemicals including titanium dioxide, 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:

DSL

All components of this product are on the Canadian DSL

TSCA

All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

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

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Further information

NFPA:

HEALTH	3
FLAMMABILITY	3
INSTABILITY	0
SPECIAL HAZARD.	

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

HMIS III:

HEALTH	0
FLAMMABILITY	3
PHYSICAL HAZARD	0

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

OSHA - GHS Label Information:

Hazard pictograms



Health hazard

Signal word

: **Danger:**

Hazard statements

: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May form combustible dust concentrations in air.

Precautionary statements

: Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Prevention: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. In case of inadequate ventilation wear respiratory protection.

Response: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

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

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