

# SAFETY DATA SHEET

## ZEP FS FORMULA 386L\_4-4L

Version 1.2

Revision Date 10/01/2023

Print Date 04/27/2025

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP FS FORMULA 386L\_4-4L

Material number : 338654C

#### Manufacturer or supplier's details

Company : Zep Inc.

Address : 11627 - 178 Street  
Edmonton, Alberta T5S 1N6  
Canada

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.

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

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance	liquid
Colour	clear, red
Odour	characteristic

#### GHS Classification

Skin corrosion : Category 1

Serious eye damage : Category 1

#### GHS label elements

Hazard pictograms :



Corrosion

Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**

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P264 Wash skin thoroughly after handling.

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.

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.

### 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 [%]
orthophosphoric acid	7664-38-2	$\geq 15 - < 40$
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	$\geq 1 - < 5$
Alcohols, C12-16, ethoxylated	68551-12-2	$\geq 1 - < 5$

## 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.  
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

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	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. 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. Symptoms may include blistering, irritation, burns, and pain. Effects are dependent on exposure (dose, concentration, contact time). 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	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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 Smoke Phosphorus compounds Nitrogen oxides (NO <sub>x</sub> )
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.

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

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- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- 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 : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapours or spray mist.  
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 : 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 : Oxidizing agents  
Store and keep away from bases and alkalies.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
orthophosphoric acid	7664-38-2	TWA	1 mg/m <sup>3</sup>	CA AB OEL
		STEL	3 mg/m <sup>3</sup>	CA AB OEL
		TWA	1 mg/m <sup>3</sup>	CA BC OEL
		STEL	3 mg/m <sup>3</sup>	CA BC OEL
		TWAEV	1 mg/m <sup>3</sup>	CA QC OEL
		STEV	3 mg/m <sup>3</sup>	CA QC OEL
		TWA	1 mg/m <sup>3</sup>	ACGIH
		STEL	3 mg/m <sup>3</sup>	ACGIH

- Engineering measures : effective ventilation in all processing areas

#### Personal protective equipment

- Respiratory protection : Use respiratory protection unless adequate local exhaust

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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.
Eye protection	: Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems. Ensure that eyewash stations and safety showers are close to the workstation location.
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.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear, red
Odour	: characteristic
Odour Threshold	: No data available
pH	: < 2
Melting point/freezing point	: No data available
Boiling point	: 100 °C
Flash point	: > 93.3 °C Method: TCC
Evaporation rate	: 1
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.16 g/cm <sup>3</sup>
Bulk density	: No data available
Solubility(ies)	
Water solubility	: soluble

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Solubility in other solvents	: soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
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.
Conditions to avoid	: No data available
Incompatible materials	: Oxidizing agents Reducing agents Bases
Hazardous decomposition products	: No hazardous decomposition products are known.

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### SECTION 11. TOXICOLOGICAL INFORMATION

#### Potential Health Effects

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Effects are immediate and delayed.  
Symptoms may include blistering, irritation, burns, and pain.  
Effects are dependent on exposure (dose, concentration, contact time).  
Causes severe skin burns and eye damage.  
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.

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### ACGIH

Confirmed animal carcinogen with unknown relevance to humans

ethanol

64-17-5

### Acute toxicity

#### Product:

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

#### Components:

##### **Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:**

Acute inhalation toxicity : LC50 Rat: 0.054 - 0.51 mg/l  
Test atmosphere: dust/mist  
Method: Third Party Data - Actual or Inferred

Acute dermal toxicity : LD50 Rat: 930 mg/kg  
Method: Third Party Data - Actual or Inferred

### 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

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### 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- : Remarks: No data available  
octanol/water

### Mobility in soil

No data available

### Other adverse effects

No data available

**Product:**

Additional ecological : No data available  
information

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## 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.

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## SECTION 14. TRANSPORT INFORMATION

Transportation Regulation (TDG) / Règlement Pour Le Transport (TMD): (Canada): UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (PHOSPHORIC ACID), 8, III - Limited quantity
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Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel):  
UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (PHOSPHORIC ACID), 8, III - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air):  
UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (PHOSPHORIC ACID), 8, III

Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air):  
UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (PHOSPHORIC ACID), 8, III

Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA):  
UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (PHOSPHORIC ACID), 8, III - Limited quantity

The product as delivered to the customer conforms to packaging requirements for shipment by road under Transport Dangerous Goods (TDG) Canada 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

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

**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

WHMIS - GHS Label Information:

Hazard pictograms :



Corrosion

Signal word : **Danger:**  
Hazard statements : Causes severe skin burns and eye damage.

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Precautionary statements

:

**Prevention:** Wash skin thoroughly after handling. 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. 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.

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

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