ZEP FS CHLOR-5

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP FS CHLOR-5

Material number : 0000000000115750

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 : CHEMTREC: 800-424-9300 - All Calls Recorded.

Emergency 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 | mild |

GHS Classification

Skin corrosion : Category 1A 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:**

P260 Do not breathe dust or mist.

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.

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

P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. 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:

P405 Store locked up.

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 |
| sodium hydroxide | 1310-73-2 | >= 20 - < 30 |
| troclosene sodium, dihydrate | 51580-86-0 | >= 1 - < 5 |
| tetrasodium pyrophosphate | 7722-88-5 | >= 1 - < 5 |

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.

If on skin, rinse well with water. If on clothes, remove clothes.

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

tissue damage and blindness.

In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

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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.

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.

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

Specific extinguishing

methods

: No hazardous combustion products are known

: 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

: Neutralise with acid.

containment and cleaning up Keep in suitable, closed containers for disposal.

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SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapours/dust. 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.

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. 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 (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---------------------------|-----------|-------------------------------------|--|-----------|
| sodium hydroxide | 1310-73-2 | С | 2 mg/m3 | ACGIH |
| | | С | 2 mg/m3 | NIOSH REL |
| | | TWA | 2 mg/m3 | OSHA Z-1 |
| | | С | 2 mg/m3 | OSHA P0 |
| | | С | 2 mg/m3 | CAL PEL |
| tetrasodium pyrophosphate | 7722-88-5 | TWA | 5 mg/m3 | NIOSH REL |
| | | TWA | 5 mg/m3 | OSHA P0 |
| | | PEL | 5 mg/m3 | CAL PEL |

Personal protective equipment

Hand protection

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection : Dust impervious protective suit

Choose body protection according to the amount and

concentration of the dangerous substance at the work place.

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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 : mild

Odour Threshold : No data available

pH : 12.5 - 13.5, 1 %(as aqueous solution)

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 : No data available

Density : No data available

Solubility(ies)

Water solubility : 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 : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under normal conditions.

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Possibility of hazardous

reactions

: Hazardous decomposition products formed under fire

conditions.

No decomposition if stored and applied as directed.

Conditions to avoid : Exposure to light.

Heat

Incompatible materials : Organic materials

Acids

Hazardous decomposition

products

: Chlorine

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

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.

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. 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.

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 : 3,912 mg/kg

Method: Calculation method

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

Method: Calculation method

Components:

sodium carbonate:

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

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Acute inhalation toxicity : LC50 Rat: 5,750 mg/l

Exposure time: 2 h

sodium hydroxide:

Acute dermal toxicity : Acute toxicity estimate Rabbit: 1,350 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

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

sodium hydroxide:

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Toxicity to fish : LC50 (Gambusia affinis (Mosquito fish)): 125 mg/l

Exposure time: 96 h Test Method: static test

LC50 (Oncorhynchus tshawytscha (chinook salmon)):

152 mg/l

Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 40 mg/l

Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 34 - 47 mg/l

Exposure time: 48 h

EC50 (Crangon crangon (shrimp)): 33 - 100 mg/l

Exposure time: 48 h

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

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to

aquatic life.

The GHS H401 statement "Toxic to aquatic life" noted

above is an Acute Aquatic Toxicity Category 2

classification. Although the product has the potential to harm the environment, it is not classified as a marine pollutant or regulated under transportation regulations.

<u>Components:</u> sodium hydroxide :

Additional ecological : Harmful to aquatic life.

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information

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : 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):

UN3262, Corrosive solid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IMDG (Vessel):

UN3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IATA (Cargo Air):

UN3262, Corrosive solid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IATA (Passenger Air):

UN3262, Corrosive solid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: TDG (Canada):

UN3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, II

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 : Not relevant

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

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ | Calculated product RQ |
|------------------|-----------|--------------|-----------------------|
| | | (lbs) | (lbs) |
| sodium hydroxide | 1310-73-2 | 1000 | 4165 |

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

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SARA 311/312 Hazards : Skin corrosion or irritation

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

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:

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

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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.

Prevention: Do not breathe dust or mist. 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): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. 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 locked up.

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

SAFETY DATA SHEET ZEP FS CHLOR-5

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| Version: | 2.1 |
|----------------|------------|
| Revision Date: | 10/01/2023 |
| Print Date: | 04/25/2025 |

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