ZEP KING-PIN POWDER LARGE VEHICLE AND EQUIPMENT CLEANER

Version 2.1 Revision Date 10/01/2023 Print Date 04/25/2024

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP KING-PIN POWDER LARGE VEHICLE AND

EQUIPMENT CLEANER

Material number : M98135

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.

In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

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

GHS Classification

Acute toxicity (Oral) : Category 4
Skin corrosion : Category 1
Serious eye damage : Category 1
Specific target organ toxicity - : Category 2

repeated exposure

(Inhalation)

GHS label elements

Hazard pictograms







Health hazard Corro

Signal word : Danger

Hazard statements : H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H373 May cause damage to organs through prolonged or

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repeated exposure if inhaled.

Precautionary statements :

: Prevention:

P260 Do not breathe dust/fume/ gas/mist/vapours/spray.

P264 Wash skin thoroughly after handling.

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

P314 Get medical advice/ attention if you feel unwell. 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 [%] |
|---|-------------|-------------------|
| tetrasodium ethylenediaminetetraacetate | 64-02-8 | >= 10 - < 20 |
| Alcohols, C9-11, ethoxylated | 68439-46-3 | >= 10 - < 20 |
| Sodium metasilicate (disodium salt) | 6834-92-0 | >= 10 - < 20 |
| sodium hydroxide | 1310-73-2 | >= 10 - < 20 |
| silica gel | 112926-00-8 | >= 1 - < 3 |
| tetrasodium pyrophosphate | 7722-88-5 | >= 1 - < 3 |
| 5(or 6)-carboxy-4-hexylcyclohex-2-ene-1-octanoic acid | 53980-88-4 | >= 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.

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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 clothes, remove clothes.

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing

and shoes.

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.

In case of contact, immediately flush eyes 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.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water

Carbon dioxide (CO2)

Dry chemical

Foam

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.

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Hazardous combustion

products

: Carbon dioxide (CO2) Carbon monoxide

Smoke

Phosphorus compounds Nitrogen oxides (NOx)

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.

Sweep up or vacuum up spillage and collect in suitable

container 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.

This product is formulated for use on hard metal surfaces. This product does contain a reducing agent(s) that may

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corrode soft metals. This product should be stored in its original packaging or containers of similar construction, and

not in metal vessels.

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 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 |
| | | TWA | 6 mg/m3 | OSHA P0 |
| | | TWA | 6 mg/m3 | NIOSH REL |
| 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 : Protective gloves

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.

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.

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 : wet powder

Colour : white
Odour : odourless

Odour Threshold : No data available

pH : 13, 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 : Not applicable

Relative vapour density : No data available

Density : No data available

Solubility(ies)

Water solubility : 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

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

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Incompatible materials : Acids

Oxidizing agents

This product contains sodium hydroxide or potassium hydroxide that may corrode some soft metals and may react

with tin, zinc, aluminum to form hydrogen gas.

Hazardous decomposition

products

: Carbon oxides

Phosphorus compounds Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical

Condition

: None known.

Symptoms of Overexposure

: 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. 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 : 1,586 mg/kg

Method: Calculation method

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

Method: Calculation method

Components:

Alcohols, C9-11, ethoxylated:

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

Sodium metasilicate (disodium salt):

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

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

Components:

tetrasodium ethylenediaminetetraacetate:

Exposure routes: Inhalation

Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

sodium hydroxide:

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/

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

: No data available

Components:

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sodium hydroxide:

Additional ecological

information

: Harmful to aquatic life.

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):

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 : No substances are subject to a Significant New Use Rule.

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

requirements.

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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 | * |

^{*:} 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 : Acute toxicity (any route of 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)

SECTION 16. OTHER INFORMATION

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Further information

NFPA:

| HEALTH | 3 |
|-----------------|---|
| FLAMMABILITY | 0 |
| 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

Hazard statements



Corrosion



Health na

Signal w ord : Danger

: Harmful if sw allowed. Causes severe skin burns and eye damage. May cause damage

to organs through prolonged or repeated exposure if inhaled.

Precautionary statements : Prevention: Do not breathe dust/fume/ gas/ mist/ vapours/spray. Wash skin

Prevention: Do not breathe dust/fume/ gas/mist/ vapours/spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

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

Response: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unw ell. Rinse mouth. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin w ith w ater/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously w ith water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Immediately call a POISON CENTER/doctor. Get medical advice/attention if you feel unw ell. Wash contaminated clothing before reuse.

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

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|----------------|------------|
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