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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP BIO UNIVERSAL BIOLOGICAL TREATMENT_210L

Material number P22276C

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

Emergency

Recommended use of the chemical and restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	blue
Odour	characteristic

GHS Classification

Oxidizing liquids : Category 3 Skin irritation : Category 2 : Category 1 Serious eye damage

GHS label elements

Hazard pictograms



Flame over circle





Signal word Danger

Hazard statements : H272 May intensify fire; oxidizer.

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H315 Causes skin irritation.

H318 Causes serious eye damage.

Precautionary statements : **Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking.

P220 Keep away from clothing and other combustible

materials.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.

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.

P332 + P313 If skin irritation occurs: Get medical advice/

attention.

P362 + P364 Take off contaminated clothing and wash it before

reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam to extinguish.

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 nitrate	7631-99-4	>= 10 - < 30
Benzenesulfonic acid, C10-16-alkyl derivs.	68584-22-5	>= 1 - < 5
diammonium hydrogenorthophosphate	7783-28-0	>= 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 : If skin irritation persists, call a physician.

Wash off immediately with plenty of water for at least 15

minutes.

Remove contaminated clothing and shoes. Wash contaminated clothing before reuse.

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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.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

: Effects are dependent on exposure (dose, concentration,

If symptoms persist, call a physician. Take victim immediately to hospital.

Most important symptoms and effects, both acute and

and effects, both acute and delayed

contact time).

Effects are immediate and delayed.

Symptoms may include irritation, redness, pain, and rash.

Causes skin irritation.

Causes serious 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 : Alcohol-resistant foam

Carbon dioxide (CO2)

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 (CO2) Carbon monoxide

Nitrogen oxides (NOx)

Smoke

Sulphur oxides

Phosphorus compounds

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. For safety reasons in case of fire, cans should be stored

separately in closed containments.

Use a water spray to cool fully closed containers.

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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 Environmental precautions : Use personal protective equipment.

: 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

: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13).

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.

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 : Store and keep away from bases and alkalies.

Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory

equipment.

Hand protection

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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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : blue

Odour : characteristic
Odour Threshold : No data available

pH : 7 - 7.8

Melting point/freezing point : No data available

Boiling point : 100 °C

Flash point :

No data available

Evaporation rate : 1

Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : No data available
Relative vapour density : No data available

Density : 1 g/cm3

Bulk density : No data available

Solubility(ies)

Water solubility : soluble in cold water, soluble in hot water

Solubility in other solvents : soluble

Partition coefficient: n-

octanol/water

: No data available

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Auto-ignition temperature : No data available
Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available 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

Bases

Hazardous decomposition

products

: No hazardous decomposition products are known.

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 skin irritation.

Causes serious 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.

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Acute toxicity

Product:

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

Method: Calculation method

Components:

sodium nitrate:

Acute oral toxicity : LD50 Oral Rat: 1,267 mg/kg

LD50 Oral Rabbit: 2,680 mg/kg

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

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

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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
Components:
sodium nitrate:

Partition coefficient: n-

: log Pow: -3.8 (25 °C)

octanol/water

Mobility in soil

No data available

Other adverse effects

No data available

Product:

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.

Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation (TDG) / Règlement Pour Le Transport (TMD): (Canada): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

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Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

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

Signal word





Flame over circle

: Danger:

Hazard statements : May intensify fire; oxidizer. Causes skin irritation. Causes serious eye damage.

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Precautionary statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Wash skin thoroughly after handling. Wear protective gloves/ eye protection/ face protection. Response: IF ON SKIN: Wash with plenty of water. 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. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

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

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