Version 1.1 Revision Date 10/01/2023 Print Date 04/27/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP SPIRIT II DETERGENT DISINFECTANT_5GL

Material number 00000000000067939

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	colourless
Odour	characteristic

GHS Classification

Eye irritation : Category 2A : Category 2 Specific target organ toxicity -

repeated exposure

(Inhalation)

GHS label elements

Hazard pictograms



Signal word : Warning

Version 1.1 Revision Date 10/01/2023 Print Date 04/27/2025

Hazard statements : H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**

P264 Wash skin thoroughly after handling. P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
2-(2-butoxyethoxy)ethanol	112-34-5	>= 5 - < 10
tetrasodium ethylenediaminetetraacetate	64-02-8	>= 1 - < 5

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.

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 plenty of water for at least 15

minutes.

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.

If in eyes, rinse with water for 15 minutes.

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.

Never give anything by mouth to an unconscious person.

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

Most important symptoms : Effects are immediate and delayed.

Version 1.1 Revision Date 10/01/2023 Print Date 04/27/2025

and effects, both acute and

delayed

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

Causes serious 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 : Use water spray, alcohol-resistant foam, dry chemical or

carbon dioxide.

Unsuitable extinguishing

media

: High volume water jet

Hazardous combustion

products

: Carbon dioxide (CO2) Carbon monoxide

Smoke

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 Environmental precautions : Use personal protective equipment.

: Prevent further leakage or spillage if safe to do so.

Prevent product from entering drains.

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 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

Version 1.1 Revision Date 10/01/2023 Print Date 04/27/2025

regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated

place.

Electrical installations / working materials must comply with

the technological safety standards.

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
2-(2-butoxyethoxy)ethanol	112-34-5	TWA (Inhalable fraction and vapor)	10 ppm	ACGIH

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally

required.

Follow personal protective equipment guidance noted on the product label when using this product, especially if cleaning

areas soiled with blood or body fluids.

In the workplace- If a significant exposure or spill occurs, use

respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Material : Latex gloves

Protective gloves

Remarks : When using this product to disinfect surfaces or handling

items soiled with blood or body fluids use disposable latex gloves. Follow personal protective equipment guidance noted on the product label when using this product, especially if

cleaning areas soiled with blood or body fluids.

In the workplace- If a significant exposure or spill occurs, use chemical-resistant gloves if prolonged or frequent contact is

possible or likely.

Eye protection : Safety glasses with side-shields

Ensure that eyewash stations and safety showers are close to

the workstation location.

Version 1.1 Revision Date 10/01/2023 Print Date 04/27/2025

Skin and body protection : For general disinfecting, no special protection is required.

Follow personal protective equipment guidance noted on the product label when using this product, especially if cleaning

areas soiled with blood or body fluids.

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and

to the specific 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 : colourless
Odour : characteristic
Odour Threshold : No data available

pH : 11.5 - 12.5

Melting point/freezing point : No data available

Boiling point : $> 100 \,^{\circ}\text{C}$ Flash point : $> 93.3 \,^{\circ}\text{C}$

Method: closed cup

Upper explosion limit : not determined

Lower explosion limit : not determined

Vapour pressure : No data available

Density : 1 g/cm3

Solubility(ies)

Water solubility : soluble

Solubility in other solvents : not determined

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : not determined
Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : 3.8 mm2/s (20 °C)

Version 1.1 Revision Date 10/01/2023 Print Date 04/27/2025

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

Acids

Alkali metals

Hazardous decomposition

products

: Carbon oxides

Nitrogen oxides (NOx)

Ammonia

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical

Condition

: None known.

Symptoms of Overexposure : Effects are immediate and delayed.

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

Causes serious 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.

Acute toxicity

Product:

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

Method: Calculation method

Skin corrosion/irritation

Product:

Result: Mild skin irritation

Version 1.1 Revision Date 10/01/2023 Print Date 04/27/2025

Method: Third Party Data - Actual or Inferred

Serious eye damage/eye irritation

Product:

Result: Eye irritation

Method: Third Party Data - Actual or Inferred

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish

Remarks: Toxic to aquatic organisms.

Harmful to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

Toxicity to daphnia and

Version 1.1 Revision Date 10/01/2023 Print Date 04/27/2025

other aquatic invertebrates Remarks: Harmful to aquatic organisms, may cause

long-term adverse effects in the aquatic environment.

Toxic to aquatic organisms.

: Remarks: No data available

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Partition coefficient: n-

octanol/water Components:

2-(2-butoxyethoxy)ethanol:

Partition coefficient: n-

octanol/water

: Pow: 1

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.

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Provincial Environmental control agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for

guidance.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation (TDG) / Règlement Pour Le Transport (TMD): (Canada):

Version 1.1 Revision Date 10/01/2023 Print Date 04/27/2025

NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

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

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:

DSL All components of this product are on the Canadian DSL TSCA On TSCA Inventory

On 150A 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

WHMIS - GHS Label Information:

Version 1.1 Revision Date 10/01/2023 Print Date 04/27/2025

Hazard pictograms



mark
Warning:

Signal word Hazard statements Precautionary statements

Causes serious eye irritation.

Description Mach plant the according of the plant of the

Prevention: Wash skin thoroughly after handling. Wear eye protection/ face protection. **Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Version:	1.1
Revision Date:	10/01/2023
Print Date:	04/27/2025

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.