

SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP CONCENTRATED GLASS CLEANER FREEZE
FREE_4L_4CT

Material number : 233554C

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	blue
Odour	No data available

GHS Classification

Flammable liquids : Category 3

Acute toxicity (Oral) : Category 3

Acute toxicity (Inhalation) : Category 3

Acute toxicity (Dermal) : Category 3

Specific target organ toxicity -
single exposure : Category 1

GHS label elements




SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

Hazard pictograms	:	  
		Flame Skull and crossbones Health hazard
Signal word	:	Danger
Hazard statements	:	H226 Flammable liquid and vapour. H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled. H370 Causes damage to organs.
Precautionary statements	:	Prevention: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. 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. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor. P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor. P361 + P364 Take off immediately all contaminated clothing and wash it before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Storage: P403 + P235 Store in a well-ventilated place. Keep cool. Disposal: P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

Chemical name	CAS-No.	Concentration [%]
methanol	67-56-1	>= 30 - < 60

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 : Wash off immediately with plenty of water for at least 15 minutes.
If on clothes, remove clothes.
- In case of eye contact : If in eyes, rinse with water for 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 unless directed to do so by a physician or poison control center.
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 : Symptoms may include central nervous system depression, resulting in headache, nausea and/or dizziness.
Effects are dependent on exposure (dose, concentration, contact time).
Causes damage to organs if swallowed.
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
- 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

SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

Specific extinguishing methods	: Smoke : 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.
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. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
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). 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/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. Take precautionary measures against static discharges. 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	: No smoking. 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.

SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Oxidizing agents
Do not store near 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
methanol	67-56-1	TWA	200 ppm 262 mg/m ³	CA AB OEL
		STEL	250 ppm 328 mg/m ³	CA AB OEL
		TWA	200 ppm	CA BC OEL
		STEL	250 ppm	CA BC OEL
		TWAEV	200 ppm 262 mg/m ³	CA QC OEL
		STEV	250 ppm 328 mg/m ³	CA QC OEL
		TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI

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.
Safety glasses

SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

- 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 : Avoid contact with skin, eyes and clothing.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : blue
- Odour : No data available
- Odour Threshold : No data available
- pH : 10 - 10.5
- Melting point/freezing point : No data available
- Boiling point : 66 °C
- Flash point : 25 °C
Method: TCC
- Evaporation rate : 3.5
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : 1.3 hPa
- Relative vapour density : No data available
- Density : 0.93 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 : No data available

SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

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. Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents Acids
Hazardous decomposition products	: No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Symptoms may include central nervous system depression, resulting in headache, nausea and/or dizziness. Effects are dependent on exposure (dose, concentration, contact time). Causes damage to organs if swallowed. 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 Confirmed animal carcinogen with unknown relevance to humans

2-butoxyethanol 111-76-2

Acute toxicity

Product:

Acute oral toxicity	: Acute toxicity estimate : 200 mg/kg Method: Calculation method
---------------------	---

SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

Acute inhalation toxicity : Acute toxicity estimate : 6 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : 600 mg/kg
Method: Calculation method

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

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: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

Product:

Partition coefficient: n-octanol/water : Remarks: No data available

Components:

methanol :

Partition coefficient: n-octanol/water : log Pow: -0.77

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 contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.
The product should not be allowed to enter drains, water courses or the soil.

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): UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S., (METHANOL), 3, (6.1), II

Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel): UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S., (METHANOL), 3, (6.1), II
--

Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air): UN1992, Flammable liquid, toxic, n.o.s., (METHANOL), 3, (6.1), II

Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air): UN1992, Flammable liquid, toxic, n.o.s., (METHANOL), 3, (6.1), II

Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA): UN1992, Flammable liquids, toxic, n.o.s., (METHANOL), 3, (6.1), II
--

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

SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

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

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 :



Flame

Skull and crossbones

Health hazard

Signal word :

Danger:

Hazard statements :

Flammable liquid and vapour. Toxic if swallowed, in contact with skin or if inhaled. Causes damage to organs.

Precautionary statements :

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response: IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. 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. Call a POISON CENTER/doctor. IF exposed or concerned: Call a POISON CENTER/doctor. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage: Store in a well-ventilated place. Keep cool.

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

SAFETY DATA SHEET

ZEP CONCENTRATED GLASS CLEANER FREEZE FREE_4L_4CT

Version 2.1

Revision Date 10/01/2023

Print Date 11/09/2024

Version:	2.1
Revision Date:	10/01/2023
Print Date:	11/09/2024

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.