

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP CONCENTRATED GLASS CLEANER 4-1GL

Material number : 00000000000105225

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

Telephone : 404-352-1680

Emergency telephone numbers**For SDS Information** : Compliance Services 1-877-428-9937**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**

Recommended use : Glass Cleaner

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance	liquid
Colour	blue, clear
Odour	characteristic

GHS Classification

Flammable liquids : Category 3
 Eye irritation : Category 2A
 Specific target organ toxicity - single exposure : Category 3 (Central nervous system)
 Specific target organ toxicity - repeated exposure (Inhalation) : Category 2

GHS label elements

Hazard pictograms : 

Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.
 H373 May cause damage to organs through prolonged or

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

repeated exposure if inhaled.

Precautionary statements

: **Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces.

No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

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

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

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

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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

P314 Get medical advice/ attention if you feel unwell.

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

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P235 Keep cool.

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 [%]
propan-2-ol	67-63-0	>= 10 - < 20
ammonium dodecyl sulphate	2235-54-3	>= 1 - < 3
tetrasodium ethylenediaminetetraacetate	64-02-8	>= 1 - < 3

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

General advice	: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended. Get medical attention immediately.
If inhaled	: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician. Move to fresh air.
In case of skin contact	: Remove contaminated clothing and shoes. If symptoms persist, call a physician. Wash clothing before reuse. Wash off immediately with plenty of water for at least 15 minutes.
In case of eye contact	: Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Most important symptoms and effects, both acute and delayed	: Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash. Effects are dependent on exposure (dose, concentration, contact time). Symptoms may differ depending on organs and systems affected. These effects generally are reflected in reduced function or change, which may include cramping, swelling, respiratory issues, and general pain. 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	: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical Water spray
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.

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

Hazardous combustion products	: Carbon dioxide (CO ₂) Carbon monoxide Smoke Nitrogen oxides (NO _x) Sulphur oxides
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.
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	: 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	: Avoid formation of aerosol. 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. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. 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

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

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
propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m ³	NIOSH REL
		ST	500 ppm 1,225 mg/m ³	NIOSH REL
		TWA	400 ppm 980 mg/m ³	OSHA Z-1
		TWA	400 ppm 980 mg/m ³	OSHA P0
		STEL	500 ppm 1,225 mg/m ³	OSHA P0
		PEL	400 ppm 980 mg/m ³	CAL PEL
		STEL	500 ppm 1,225 mg/m ³	CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workweek	40 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

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	: Safety glasses Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.
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, clear
Odour	: characteristic
Odour Threshold	: No data available
pH	: 9.0 - 9.5
Melting point/freezing point	: No data available
Boiling point	: 100 °C
Flash point	: 31.1 °C Method: closed cup
Evaporation rate	: 1
Upper explosion limit	: 12 %(V)
Lower explosion limit	: 1 %(V)
Vapour pressure	: not determined
Relative vapour density	: No data available
Density	: 0.976 g/cm ³
Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : 5.5 mm²/s (20 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Vapours may form explosive mixture with air.
No decomposition if stored and applied as directed.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition products : Carbon dioxide (CO₂)
Carbon monoxide
Nitrogen oxides (NO_x)
Sulphur oxides

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.
Effects are dependent on exposure (dose, concentration, contact time).
Symptoms may differ depending on organs and systems affected. These effects generally are reflected in reduced function or change, which may include cramping, swelling, respiratory issues, and general pain.

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
ethanol 64-17-5

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

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 : > 5,000 mg/kg
Method: Calculation method

Components:**propan-2-ol:**

Acute oral toxicity : LD50 Oral Rat: 4,396 mg/kg
Method: Calculation method

ammonium dodecyl sulphate:

Acute oral toxicity : LD50 Oral Rat: > 5,000 mg/kg

Skin corrosion/irritation**Product:**

Remarks: May irritate skin.

Serious eye damage/eye irritation**Product:**

Remarks: Severe eye irritation

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

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

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**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

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.

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

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: 49 CFR (USA):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):
UN1993, FLAMMABLE LIQUID, N.O.S., (ETHANOL), 3, III

Transportation Regulation: IATA (Cargo Air):
UN1993, Flammable liquid, n.o.s., (ETHANOL), 3, III

Transportation Regulation: IATA (Passenger Air):
UN1993, Flammable liquid, n.o.s., (ETHANOL), 3, III

Transportation Regulation: TDG (Canada):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

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.

EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity

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

*: Calculated RQ exceeds reasonably attainable upper limit.

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
 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.

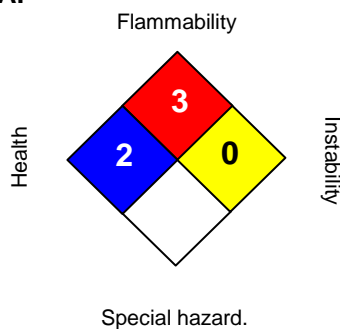
Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

OSHA - GHS Label Information:

ZEP CONCENTRATED GLASS CLEANER 4-1GL

Version 2.1

Revision Date 11/12/2018

Print Date 02/25/2020

Hazard pictograms



Signal word

: **Warning:**

Hazard statements

: Flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements

:

Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection.

Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/ attention if you feel unwell. If eye irritation persists: Get medical advice/ attention. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

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

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

Version:	2.1
Revision Date:	11/12/2018
Print Date:	02/25/2020

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.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.