Version 3.2

Revision Date 10/01/2023

Print Date 04/27/2024

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	ZEP CONCENTRATED GLASS CLEANER
Material number	:	0000000000105235
Manufacturer or supplier's o	deta	nils
Company	:	Zep Inc.
Address	:	350 Joe Frank Harris Parkway, SE Emerson, GA 30137
Telephone	:	Compliance Services - 877-428-9937

Emergency telephone nu	mbe	rs
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		In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

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 -	: Category 2
repeated exposure	
(Inhalation)	

GHS label elements

Hazard pictograms	: Flame Health hazard Exclamation mark
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 repeated exposure if inhaled.

Version 3.2	Revision Date 10/01/2023	Print Date 04/27/2024
Precautionary statements	 Prevention: P210 Keep away from heat, hot is and other ignition sources. No sm P233 Keep container tightly close P240 Ground and bond container P241 Use explosion-proof electric equipment. P242 Use non-sparking tools. P243 Take action to prevent stati P260 Do not breathe dust/fume/P264 Wash skin thoroughly after P271 Use only outdoors or in a w P280 Wear protective gloves/ proprotection/ face protection. Response: P303 + P361 + P353 IF ON SKIN immediately all contaminated clot P304 + P340 + P312 IF INHALED and keep comfortable for breathin CENTER/doctor if you feel unwell P305 + P351 + P338 IF IN EYES for several minutes. Remove conteasy to do. Continue rinsing. P314 Get medical advice/ attention P370 + P378 In case of fire: Use alcohol-resistant foam to extinguis Storage: P403 + P233 Store in a well-ventil tightly closed. P235 Keep cool. Disposal: P501 Dispose of contents/contain regulation. 	noking. and receiving equipment. cal/ventilating/ lighting c discharges. gas/mist/vapours/ spray. handling. ell-ventilated area. tective clothing/ eye l (or hair): Take off thing. Rinse skin with water. call a POISON Remove person to fresh air g. Call a POISON Rinse cautiously with water tact lenses, if present and on if you feel unwell. ists: Get medical advice/ dry sand, dry chemical or sh.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
ethanol	64-17-5	>= 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

General advice

: Move out of dangerous area.

Version 3.2	Revision Date 10/01/2023	Print Date 04/27/2024
	Show this safety data sheet to the Do not leave the victim unattender Get medical attention immediately	ed.
If inhaled	 If unconscious, place in recovery advice. If symptoms persist, call a physic Move to fresh air. 	
In case of skin contact	: Remove contaminated clothing a If symptoms persist, call a physic Wash clothing before reuse. Wash off immediately with plenty minutes.	ian.
In case of eye contact	: Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing If eye irritation persists, consult a Rinse immediately with plenty of for at least 15 minutes.	specialist.
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to If symptoms persist, call a physic DO NOT induce vomiting unless physician or poison control cente	ian. directed to do so by a
Most important symptoms and effects, both acute and delayed	 Effects are immediate and delayers Symptoms may include irritation, Effects are dependent on exposu contact time). Symptoms may differ depending affected. These effects generally function or change, which may in respiratory issues, and general per Causes serious eye irritation. Review section 2 of SDS to see a 	redness, pain, and rash. are (dose, concentration, on organs and systems are reflected in reduced clude cramping, swelling, ain.
Notes to physician	: Treat symptomatically. Symptom	ns 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.
Hazardous combustion	: Carbon dioxide (CO2)

Version 3.2	Revision Date 10/01/2023	Print Date 04/27/2024
products	Carbon monoxide Smoke Nitrogen oxides (NOx) Sulphur oxides	
Specific extinguishing methods	: Use extinguishing measures that an circumstances and the surrounding	
Further information	 Collect contaminated fire extinguish must not be discharged into drains. Fire residues and contaminated fire be disposed of in accordance with For safety reasons in case of fire, or separately in closed containments. Use a water spray to cool fully clos 	e extinguishing water must ocal regulations. ans should be stored
Special protective equipment for firefighters	: Wear self-contained breathing appa necessary.	aratus for firefighting if

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 place. Containers which are opened must be carefully resealed and

Version 3.2	Revision Date 10/01/2023	Print Date 04/27/2024
	kept upright to prevent leakage. Observe label precautions. Electrical installations / working mat the technological safety standards.	terials must comply with
Materials to avoid	: Keep away from oxidizing agents a materials.	nd strongly acid or alkaline

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ethanol	64-17-5	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m3	OSHA P0
		STEL	1,000 ppm	ACGIH
		PEL	1,000 ppm 1,900 mg/m3	CAL PEL

Components with workplace control parameters

Engineering measures	: effective ventilation in all processing areas
Personal protective equipme	nt
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 Remarks	 Protective gloves 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.

Version 3.2

Revision Date 10/01/2023

Print Date 04/27/2024

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: blue, clear
Odour	: characteristic
Odour Threshold	: No data available
рН	: 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/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	: 5.5 mm2/s (20 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity

: Stable

Chemical stability

: Stable under normal conditions.

ability

Version 3.2	Revision Date 10/01/2023	Print Date 04/27/2024
Possibility of hazardous reactions	: Vapours may form explosive mixt No decomposition if stored and a	
Conditions to avoid	: Heat, flames and sparks.	
Incompatible materials	: Oxidizing agents	
Hazardous decomposition products	: Carbon dioxide (CO2) Carbon monoxide Nitrogen oxides (NOx) 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. 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	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.	
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:		
ethanol:		

Version 3.2	Revision Date 10/01/2023	Print Date 04/27/2024
Acute oral toxicity	: LD50 Oral Rat: 7,060 mg/kg	
Acute inhalation toxicity	: LC50 Rat: 124.7 mg/l Exposure time: 4 h Test atmosphere: vapour	
ammonium dodecyl sulphate Acute oral toxicity	e: : LD50 Oral Rat: > 5,000 mg/kg	
Skin corrosion/irritation		
Product:		
Remarks: May irritate skin.		
Serious eye damage/eye irritatio	n	
Product:		
Remarks: Severe eye irritatior)	
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 ethylenediamin Exposure routes: Inhalation Assessment: May cause da		or repeated exposure.
Aspiration toxicity		
No data available		
Further information		
Product:		
Remarks: Solvents may de	grease the skin	

Remarks: Solvents may degrease the skin.

Version 3.2

Print Date 04/27/2024

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Product:

Persistence and degradability

No data available Bioaccumulative potential

<u> </u>	
Partition coefficient: n- octanol/water <u>Components:</u> ethanol :	
Partition coefficient: n- octanol/water	: Remarks: No data available
Mobility in soil	
No data available	
Other adverse effects	
No data available <u>Product:</u>	
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. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

Version 3.2

Revision Date 10/01/2023

Print Date 04/27/2024

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)
formaldehyde	50-00-0	100	*

*: 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

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
formaldehyde	50-00-0	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards

: Flammable (gases, aerosols, liquids, or solids)

Version 3.2		Revision Date 10/01/2023	Print Date 04/27/2024	
		Serious eye damage or eye irritation Specific target organ toxicity (single or re	peated 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				
		WARNING: This product can expose y including formaldehyde, which is/are k California to cause cancer, and methar to the State of California to cause birth reproductive harm. For more information	nown to the State of nol, which is/are known defects or other	

www.P65Warnings.ca.gov.

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

Version 3.2

Revision Date 10/01/2023

Print Date 04/27/2024

Further information

NFPA:



0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

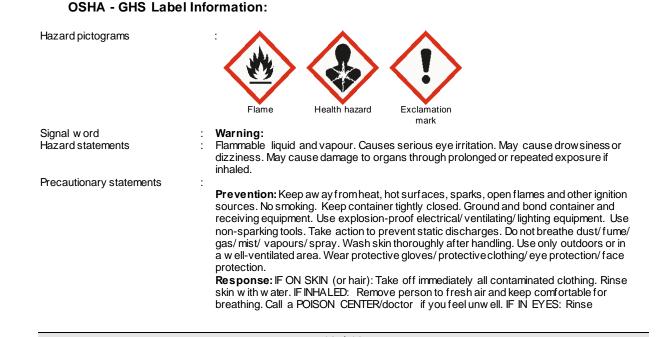
4 = Extreme

HMIS III:

HEALTH	2*
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,

- 2 = Moderate, 3 = High
- 4 = Extreme, * = Chronic



Version 3.2

Revision Date 10/01/2023

Print Date 04/27/2024

cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/ attention if you feel unw ell. 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 w ell-ventilated place. Keep container tightly closed. Keep cool. **Disposal**: Dispose of contents/container in accordance with local regulation.

Version:	3.2
Revision Date:	10/01/2023
Print Date:	04/27/2024

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.