Version 3.1

Revision Date 10/01/2023

Print Date 04/18/2024

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	ZEP MICROSOLVE DISINFECTANT CLEANER_5GL
Material number Chemical nature	:	0000000000287135 Liquid concentrate
Manufacturer or supplier's details		
Company	:	Zep, Inc.
Address	:	350 Joe Frank Harris Parkway, SE Emerson, GA 30137

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		In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Restrictions on use	:	Product Concentrate - Must be diluted per label directions
		before use.

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

GHS Classification

Appearance	liquid
Colour	clear
Odour	odourless

Skin corrosion Serious eye damage	: Category 1B : Category 1
GHS label elements	
Hazard pictograms	Corrosion
Signal word	: Danger
Hazard statements	: H314 Causes severe skin burns and eye damage.
Precautionary statements	: Prevention: P260 Do not breathe dust/fume/ gas/mist/vapours/ spray. P264 Wash skin thoroughly after handling.

Version 3.1	Revision Date 10/01/2023	Print Date 04/18/2024
	P280 Wear protective gloves/ pro	otective clothing/ eye
	protection/ face protection. Response:	
	P303 + P361 + P353 + P310 IF C	ON SKIN (or hair): Take off
	immediately all contaminated clot	
	shower. Immediately call a POIS	
	P301 + P330 + P331 IF SWALLC	WED: Rinse mouth. Do NOT
	induce vomiting.	CENTER/deator
	P310 Immediately call a POISON P304 + P340 IF INHALED: Remo	
	keep comfortable for breathing.	ve person to restrain and
	P305 + P351 + P338 + P310 IF I	N EYES: Rinse cautiously with
	water for several minutes. Remov	
	and easy to do. Continue rinsing.	-
	CENTER/doctor.	
	DOCO Week contentioned alathin	a hafara rausa

P363 Wash contaminated clothing before reuse.

Storage:

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

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Liquid concentrate

Hazardous components

Chemical name	CAS-No.	Concentration [%]
hydrogen peroxide	7722-84-1	>= 5 - < 10
Quaternary ammonium compounds, benzyl-C12- 18-alkyldimethyl, chlorides	68391-01-5	>= 1 - < 5
Quaternary ammonium compounds, C12-14- alkyl[(ethylphenyl)methyl]dimethyl, chlorides	85409-23-0	>= 1 - <= 5

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

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.
lf inhaled	 Move to fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

Version 3.1	Revision Date 10/01/2023	Print Date 04/18/2024
In case of skin contact	 Immediate medical treatment is ne wounds from corrosion of the skin difficulty. Wash off immediately with plenty of minutes. Remove contaminated clothing and If skin irritation persists, call a physical 	heal slowly and with of water for at least 15 d shoes.
In case of eye contact	 Small amounts splashed into eyes tissue damage and blindness. Rinse immediately with plenty of w for at least 15 minutes. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a s 	ater, also under the eyelids,
If swallowed	 Keep respiratory tract clear. Never give anything by mouth to an DO NOT induce vomiting unless di physician or poison control center. If symptoms persist, call a physicia Take victim immediately to hospita 	rected to do so by a m.
Most important symptoms and effects, both acute and delayed	: Symptoms may include blistering, Causes severe skin burns and eye Review section 2 of SDS to see all	damage.
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 Chlorine 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.

Version 3.1 Revision Date 10/01/2023 Print Date 04/18/2024

Use a water spray to cool fully closed containers.

Special protective equipment : In the event of fire, wear self-contained breathing apparatus. for firefighters

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation.
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	 Do not breathe vapours/dust. 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. Avoid formation of aerosol.
Conditions for safe storage	 Prevent unauthorized access. 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. Electrical installations / working materials must comply with the technological safety standards. Keep containers tightly closed in a dry, cool and well-ventilated place.
Materials to avoid	: Oxidizing agents Do not store near acids. Keep away from metals.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis

Version 3.1

Revision Date 10/01/2023 Print Date 04/18/2024

		(Form of exposure)	parameters / Permissible concentration	
hydrogen peroxide	7722-84-1	TWA	1 ppm	ACGIH
		TWA	1 ppm 1.4 mg/m3	NIOSH REL
		TWA	1 ppm 1.4 mg/m3	OSHA Z-1
		TWA	1 ppm 1.4 mg/m3	OSHA P0
		PEL	1 ppm 1.4 mg/m3	CAL PEL

Engineering measures	: 6	effective ventilation in all processing areas
Personal protective equipme	nt	
Respiratory protection	r V L	No personal respiratory protective equipment normally required. Wear a NIOSH-approved respirator Use the indicated respiratory protection if the occupational exposure limit is exceeded.
Hand protection Remarks	: lı	mpervious gloves
Eye protection	Р Р	Fightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems. Ensure that eyewash stations and safety showers are close to he workstation location.
Skin and body protection	C	mpervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	V	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	: clear
Odour	: odourless
Odour Threshold	: No data available
рН	: 3.0 - 5.9
Melting point/freezing point	: No data available

Version 3.1	Revision Date 10/01/2023	Print Date 04/18/2024
Boiling point	: >100 °C	
Flash point	: does not flash	
Evaporation rate	: not determined	
Flammability (solid, gas, liquid)	: The product is not flammable.	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapour pressure	: 23 hPa	
Relative density	: 1	
Density	: 1 g/cm3	
Solubility(ies)		
Water solubility	: completely miscible	
Partition coefficient: n- octanol/water	: No data available	
Auto-ignition temperature	: not determined	
Thermal decomposition	: No data available	
Viscosity		
Viscosity, kinematic	: No data available	
Oxidizing properties	: The substance or mixture is not clas	sified as oxidizing.

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	: Extremes of temperature and direct sunlight.
Incompatible materials	: Metals Oxidizing agents Acids Alkali metals
Hazardous decomposition products	: Carbon oxides Nitrogen oxides (NOx) Hydrogen chloride gas

Version 3.1

Revision Date 10/01/2023 Print Date 04/18/2024

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects	
Aggravated Medical Condition Symptoms of Overexposure	 None known. Symptoms may include blistering, irritation, burns, and pain. Causes severe skin burns and 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. 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.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. 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. 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 : 350 - 650 mg/kg Method: Calculation method
	Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : 3,000 mg/kg
Components:	
Quaternary ammonium con Acute oral toxicity	pounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides: : LD50 Oral Rat: > 500 mg/kg
Skin corrosion/irritation	
Product:	

Product:

Version 3.1

Revision Date 10/01/2023

Print Date 04/18/2024

Remarks: Extremely corrosive and destructive to tissue.

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

Product:

Remarks: No significant adverse effects were reported

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Product: Toxicity to fish : Toxicity to algae : Remarks: Toxic to fish. Toxicity to algae : Remarks: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Version 3.1	Revision Date 10/01/2023	Print Date 04/18/2024
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 <u>Product:</u>		
Regulation	40 CFR Protection of Environment Stratospheric Ozone - CAA Sectio Substances	-
Remarks	This product neither contains, nor with a Class I or Class II ODS as d Clean Air Act Section 602 (40 CFF + B).	lefined by the U.S.
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. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Version 3.1

Revision Date 10/01/2023

Print Date 04/18/2024

Transportation Regulation: 49 CFR (USA): UN1760, CORROSIVE LIQUIDS, N.O.S., (MIXED QUATERNARY AMMONIUM COMPOUNDS), 8, III

Transportation Regulation: IMDG (Vessel): UN1760, CORROSIVE LIQUIDS, N.O.S., (MIXED QUATERNARY AMMONIUM COMPOUNDS), 8, III

Transportation Regulation: IATA (Cargo Air): UN1760, Corrosive liquid, n.o.s., (MIXED QUATERNARY AMMONIUM COMPOUNDS), 8, III

Transportation Regulation: IATA (Passenger Air): UN1760, Corrosive liquids, n.o.s., (MIXED QUATERNARY AMMONIUM COMPOUNDS), 8, III

Transportation Regulation: TDG (Canada): UN1760, CORROSIVE LIQUIDS, N.O.S., (MIXED QUATERNARY AMMONIUM COMPOUNDS), 8, III

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

This product is regulated under the United States Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

Pesticide Labeling Information Required Under U.S. FIFRA Regulations

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: DANGER Corrosive - causes irreversible eye damage. Causes skin burns.

May be fatal if inhaled. Harmful if swallowed. Harmful if absorbed through skin. This pesticide is toxic to fish. Observe label precautions.

TSCA list

: Not relevant

EPCRA - Emergency Planning and Community Right-to-Know Act

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.

SARA 311/312 Hazards	:	Skin corrosion or irritation
		Serious eye damage or eye irritation

Version 3.1	Revision Date 10/01/2023	Print Date 04/18/2024		
SARA 302		No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.		
SARA 313	known CAS numbers that exceed t	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 California to cause cancer, birth c reproductive harm.			

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 DS	۶L

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 3.1

Revision Date 10/01/2023

Print Date 04/18/2024

Further information

NFPA:



0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

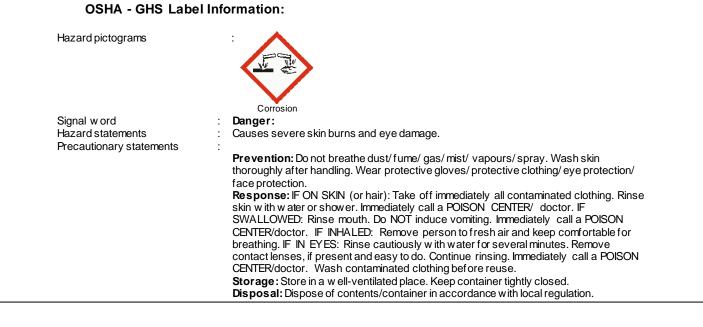
4 = Extreme

HMIS III:



0 = not significant, 1 =Slight,

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



Version 3.1

Revision Date 10/01/2023

Print Date 04/18/2024

Version:	3.1
Revision Date:	10/01/2023
Print Date:	04/18/2024

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