



Version 3.1 Revision Date 12/14/2016

Print Date 09/17/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	ZEP FOAMING GLASS CLEANER
Material number	:	ZUFGC19
Manufacturer or supplier's d	eta	ils
Company	:	Zep Inc.
Address	:	1310 Seaboard Industrial Blvd., NW Atlanta, GA 30318
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

Note: This product is labeled as a consumer product in accordance with the United States Consumer Product Safety Commission regulations. The warnings presented below in this Safety Data Sheet (SDS) comply with the 2012 OSHA Hazard Communication Standard (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of consumer products may differ from those required for GHS based hazard communication.

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	colourless
Odour	pleasant

GHS Classification	
Gases under pressure	: Liquefied gas
GHS label elements	
Hazard pictograms	
Signal word	: Warning
Hazard statements	: H280 Contains gas under pressure; may explode if heated.
Precautionary statements	: Storage: P410 + P403 Protect from sunlight. Store in a well-ventilated place.



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Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
ethanol	64-17-5	>= 1 - < 5
butane	106-97-8	>= 1 - < 5
propan-2-ol	67-63-0	>= 1 - < 5
The support is an extension of displaced outbatter and and	2011 ALL AND AND A STREET	

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

SECTION 4. FIRST AID MEASURES

General advice	Do not leave the victim unattended. Move out of dangerous area. Show this safety data sheet to the doctor in attendance.
If inhaled	If unconscious place in recovery position and seek medical advice. Consult a physician after significant exposure.
In case of skin contact	If skin irritation persists, call a physician. Wash off immediately with plenty of water for at least 15 minutes. If on clothes, remove clothes.
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 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. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	Effects may be delayed, symptoms may include minor eye or skin irritation. Overexposure may cause mild eye or skin irritation.
Notes to physician	Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES



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Suitable extinguishing media	:	Water spray jet 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 fightin courses.	g to enter drains or water
Hazardous combustion products	:	Carbon dioxide (CO2) Carbon monoxide Smoke	
Specific extinguishing methods	:	Use extinguishing measures that an circumstances and the surrounding	
Further information	:	Standard procedure for chemical fir Collect contaminated fire extinguish must not be discharged into drains. Fire residues and contaminated fire be disposed of in accordance with I For safety reasons in case of fire, c separately in closed containments. Use a water spray to cool fully close	ning water separately. This 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. Ensure adequate ventilation. 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 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). Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: Avoid exposure - obtain special instructions before use.
	Avoid contact with skin and eyes.
	For personal protection see section 8.



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	Smoking, eating and drinking show application area. Do not breathe vapours or spray r Take precautionary measures aga Provide sufficient air exchange an Dispose of rinse water in accordar regulations. Always replace cap after use.	nist. ainst static discharges. d/or exhaust in work rooms.
Conditions for safe storage	 BEWARE: Aerosol is pressurized. exposure and temperatures over & or throw into fire even after use. D red-hot objects. Keep container tightly closed in a place. Observe label precautions. Electrical installations / working m the technological safety standards Keep in a dry, cool and well-ventil 	50 °C. Do not open by force to not spray on flames or dry and well-ventilated aterials must comply with
Materials to avoid	: Oxidizing agents	

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
butane	106-97-8	TWA	800 ppm 1,900 mg/m3	NIOSH REL
		TWA	800 ppm 1,900 mg/m3	OSHA P0
		PEL	800 ppm 1,900 mg/m3	CAL PEL
propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1
		TWA	400 ppm 980 mg/m3	OSHA P0

Components with workplace control parameters



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			STE	il	500 ppm 1,225 mg/m	13	OSHA	P0
			PEL		400 ppm 980 mg/m3		CAL P	
			STE	L	500 ppm 1,225 mg/m	13	CAL F	PEL
Biological occupation	al exposure	e limits						
Component	CAS-No.	Control paramete		Biological specimen	Sampling time	concer	ssible ntration	Basis
PROPAN-2-OL	67-63-0	Acetone		Urine	End of shift at end of workwee k	40 mg/	I	ACGIH E
Personal protective eq	luipment		tilatic	on in all pro	cessing area	IS		
Personal protective eq Respiratory protection	: l \ \	Jse respirato entilation is pratication in the pratication is prat	ory pi prov	rotection ur	lless adequa	ate local sment d	lemonst	rates
-	: l v t	Jse respirato entilation is	ory pi prov es ar y for	rotection un ided or exp re within rec a specific v	iless adequa osure asses commended vorkplace sh	ate local sment d exposur ould be	lemonst e guide	rates lines.
Respiratory protection Hand protection	: L V t : T V : E	Jse respirato entilation is j nat exposure The suitability	ory pi prov es ar y for ucers ttle v	rotection un rided or exp re within rec a specific v s of the pro	iless adequa osure asses commended vorkplace sh tective glove	ate local sment d exposur ould be	lemonst e guide	rates lines.
Respiratory protection Hand protection Remarks	n : I	Jse respirato entilation is p nat exposure The suitability vith the produ	pry pi prov es ar y for ucer: ttle v es lothir	rotection un rided or exp re within rec a specific v s of the pro with pure wa ng tection acco	aless adequa osure asses commended vorkplace sh tective glove ater	ate local sment d exposur ould be es. amount	e guide discuss	rates lines. ed

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Aerosol containing a liquefied gas
colourless
pleasant
No data available
10 - 11
No data available
No data available
No data available
-



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Evaporation rate	: No data available	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapour pressure	: No data available	
Relative vapour density	: No data available	
Density	: 0.986 g/cm3	
Solubility(ies)		
Water solubility	: soluble in cold water, soluble in ho	ot water
Partition coefficient: n- octanol/water	: No data available	
Auto-ignition temperature	: not determined	
Thermal decomposition	: No data available	
Viscosity		
Viscosity, kinematic	: No data available	

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	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition	:	None known.
Symptoms of Overexposure	:	Effects may be delayed, symptoms may include minor eye or skin irritation.

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.



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OSHA NTP	No component of this product prese equal to 0.1% is identified as a carc carcinogen by OSHA. No component of this product prese	nogen or potential
	equal to 0.1% is identified as a know by NTP.	
Acute toxicity		
Product:		
Acute oral toxicity	: Acute toxicity estimate : > 5,000 n Method: Calculation method	ng/kg
Components:		
ethanol:		
Acute oral toxicity	: LD50 Oral Rat: 7,060 mg/kg	
Acute inhalation toxicity	: LC50 Rat: 124.7 mg/l	
,	Exposure time: 4 h	
butane:		
Acute inhalation toxicity	: LC50 Mouse: 1,237 mg/l Exposure time: 2 h	
	LC50 Rat: 1,355 mg/l	
propan-2-ol: Acute oral toxicity	: LD50 Oral Rat: 4,396 mg/kg	
	Method: Calculation method	
Skin corrosion/irritation		
No data available		
Serious eye damage/eye irritatio	on	
No data available		
Respiratory or skin sensitisatio	n	
No data available		
Germ cell mutagenicity		
No data available		
Carcinogenicity		
No data available		
Reproductive toxicity		
No data available		
ethanol:		
butane: propan-2-ol:		
STOT - single exposure		
<u> </u>		



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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

No data available	
Persistence and degradability	
No data available Bioaccumulative potential	
Product:	
Partition coefficient: n- octanol/water <u>Components:</u> butane : Partition coefficient: n-	Remarks: No data availablePow: 2.89
octanol/water	
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



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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.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IMDG (Vessel): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IATA (Cargo Air): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IATA (Passenger Air): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: TDG (Canada): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

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

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.

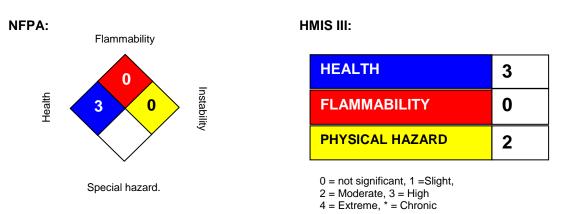
SARA 311/312 Hazards : Sudden Release of Pressure Hazard

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SARA 302	: No chemicals in this material are su requirements of SARA Title III, Sect	, , ,
SARA 313	: This material does not contain any on known CAS numbers that exceed the reporting levels established by SAR	e threshold (De Minimis)
California Prop 65	This product does not contain any c California to cause cancer, birth def reproductive harm.	
The components of t	his product are reported in the following inv	ventories:
TSCA DSL	On TSCA Inventory All components of this product are on the Ca	anadian DSL
For information on the manufacturer's regulat	country notification status for other regions ple ory group.	ease contact the
Inventory Acronym a	nd Validity Area Legend:	
TSCA (USA), DSL (Ca	nada), NDSL (Canada)	

Zepinc

SECTION 16. OTHER INFORMATION

Further information



OSHA - GHS Label Information:





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Storage: Protect from sunlight. Store in a well-ventilated place. **Disposal:** Dispose of contents/ container to an approved waste disposal plant.

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