SAFETY DATA SHEET



ZEP STREAK-FREE GLASS CLEANER

Version 1.2 Revision Date 02/05/2018 Print Date

Print Date 02/24/2020

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	ZEP STREAK-FREE GLASS CLEANER
Material number	:	ZU1120128
Manufacturer or supplier's d	leta	nils
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

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	liquid
Colour	dark, blue
Odour	pleasant

GHS Classification

Flammable liquids	Category 4
GHS label elements	
Signal word	Warning
Hazard statements	H227 Combustible liquid.
Precautionary statements	 Prevention: P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P280 Wear protective gloves/ eye protection/ face protection. Response: P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.



Version 1.2	Revision Date 02/05/2018	Print Date 02/24/2020
	Storage: P403 + P235 Store in a well-v Disposal: P501 Dispose of contents/cor regulation.	ventilated place. Keep cool. ntainer in accordance with local
SECTION 3. COMPOSITION/IN	IFORMATION ON INGREDIENTS	
Substance / Mixture	: Mixture	
Hazardous components		

Chemical name	CAS-No.	Concentration [%]
2-butoxyethanol	111-76-2	>= 1 - < 5

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

SECTION 4. FIRST AID MEASURES

General advice	:	Do not leave the victim unattended. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. 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	:	If skin irritation persists, call a physician. Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse.
In case of eye contact	:	Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist. Keep eye wide open while rinsing. 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.

SAFETY DATA SHEET



ZEP STREAK-FREE GLASS CLEANER

Version 1.2

Revision Date 02/05/2018

Print Date 02/24/2020

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Carbon dioxide (CO2) Water spray jet Alcohol-resistant foam 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 Smoke
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	:	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. Ensure adequate ventilation. Refer to protective measures listed in sections 7 and 8.
Environmental precautions	:	Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	:	Neutralise with acid. 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). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	 Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. Avoid exposure - obtain special instructions before use. Take proceeding many many processing statistic discharges.
	Take precautionary measures against static discharges.



Version 1.2	Revision Date 02/05/2018	Print Date 02/24/2020
Conditions for safe storage	 No smoking. Keep in a well-ventilated place. Observe label precautions. Electrical installations / working mathe technological safety standards 	
Materials to avoid	: Oxidizing agents	

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m3	NIOSH REL
		TWA	50 ppm 240 mg/m3	OSHA Z-1
		TWA	25 ppm 120 mg/m3	OSHA P0
		PEL	20 ppm 97 mg/m3	CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-BUTOXYETHANOL	111-76-2	Butoxyacetic	Urine	End of	200.mg/g	ACGIH BEI
	111-70-2	acid (BAA)	Unite	shift (As	Creatinine	ACGITIBLI
		,		soon as		
				possible		
				after		
				exposure		
				ceases)		

areas

Engineering measures	:	effective ventilation in all processing

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 Remarks		Protective gloves The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Safety glasses
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and



Version 1.2	Revision Date 02/05/2018	Print Date 02/24/2020
	concentration of the dangerous su	bstance 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	:	dark, blue
Odour	:	pleasant
Odour Threshold	:	No data available
рН	:	10.5 - 11.5
Melting point/freezing point	:	No data available
Boiling point	:	96.1 °C
Flash point	:	76.7 °C Method: closed cup
Evaporation rate	:	1
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	not determined
		No data available
Relative vapour density	:	No data available
Density	:	0.998 g/cm3
Solubility(ies)		
Water solubility	:	soluble in cold water, soluble in hot 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.	



Version 1.2	Revision Date 02/05/2018 Print Date 02/24/2020		
Possibility of hazardous reactions	: Vapours may form explosive mixt No decomposition if stored and a		
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and dire	ect sunlight.	
Incompatible materials	: Oxidizing agents		
Hazardous decomposition products	: Carbon oxides		

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects	
Aggravated Medical Condition Symptoms of Overexposure	 None known. 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
ACGIH	human carcinogen by IARC. Confirmed animal carcinogen with unknown relevance to humans
	2-butoxyethanol 111-76-2 ethanol 64-17-5
OSHA	No component of this product present at levels greater than or
NTP	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 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
Acute inhalation toxicity	: Acute toxicity estimate : > 200 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Components:	



Product: Remarks: May cause skin irritation and/or dermatitis. Serious eye damage/eye irritation Product: Remarks: Contact with eyes may cause irritation. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available Carcinogenicity No data available STOT - single exposure No data available STOT - repeated exposure No data available STOT - repeated exposure No data available Stort - repeated exposure No data available Aspiration toxicity No data available	Version 1.2	Revision Date 02/05/2018	Print Date 02/24/2020
Acute oral toxicity £ LD50 Darmal Rabbit: 1,060 mg/kg Skin corrosion/irritation Product: Remarks: May cause skin irritation and/or dermatitis. Strious eye damage/eye irritation Product: Remarks: Contact with eyes may cause irritation. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Respiratory or skin sensitisation No data available Garm cell mutagenicity No data available Stoft - single exposure No data available Stoft - repeated exposure No data available Stoft - single exposure No data available Stoft - repeated exposure No data available Further information Producti Remarks: No data available	2-butoxvethanol:		
Skin corrosion/irritation Product: Remarks: May cause skin irritation and/or dermatitis. Scious eye damage/eye irritation Product: Remarks: Contact with eyes may cause irritation. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available Reproductive toxicity No data available Stot - single exposure No data available Stot - repeated exposure No data available Stort - repeated exposure No data available Further information Product: Remarks: No data available		: LD50 Oral Rat: 880 mg/kg	
Skin corrosion/irritation Product: Remarks: May cause skin irritation and/or dermatitis. Scious eye damage/eye irritation Product: Remarks: Contact with eyes may cause irritation. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available Carcinogenicity No data available Stot - single exposure No data available Stot - repeated exposure No data available Stort - repeated exposure No data available Further information Product: Remarks: No data available	Acute dermal toxicity	• I D50 Dermal Rabbit [,] 1 060 mg/kg	
Product: Remarks: May cause skin irritation and/or dermatitis. Stricus eye damage/eye irritation Product: Remarks: Contact with eyes may cause irritation. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Respiratory or skin sensitisation No data available Gern cell mutagenicity No data available Carcinogenicity No data available Stot - single exposure No data available Stot - repeated exposure No data available Stot - repeated exposure No data available Stot - repeated exposure No data available Further information Product: Romarks: No data available	Acute definal toxicity		
Remarks: May cause skin irritation and/or dermatitis. Serious eye damage/eye irritation Product: Remarks: Contact with eyes may cause irritation. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Respiratory or skin sensitisation No data available Gern cell mutagenicity No data available Carcinogenicity No data available STOT - single exposure No data available STOT - repeated exposure No data available Stort - repeated exposure No data available Stort - repeated exposure No data available Further information Product: Remarks: No data available	Skin corrosion/irritation		
Serious eye damage/eye irritation Product: Remarks: Contact with eyes may cause irritation. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Respiratory or skin sensitisation No data available Gern cell mutagenicity No data available Reproductive toxicity No data available STOT - single exposure No data available STOT - repeated exposure No data available Stot repeated exposure No data available Further information Product: Remarks: No data available	Product:		
Produce: Remarks: Contact with eyes may cause irritation. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Reproductive or skin sensitisation 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: No data available	Remarks: May cause skin ir	ritation and/or dermatitis.	
Remarks: Contact with eyes may cause irritation. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Respiratory or skin sensitisation No data available Gern 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 Reproductive toxicity Ro data available STOT - repeated exposure No data available Further information Product: Remarks: No data available	Serious eye damage/eye irritat	ion	
Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin. Respiratory or skin sensitisation No data available Gern cell mutagenicity No data available Carcinogenicity No data available STOT - single exposure No data available STOT - repeated exposure No data available Reproductive toxicity No data available Retret information Product: Remarks: No data available	Product:		
Respiratory or skin sensitisation No data available Gern 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 Stot - repeated exposure No data available Further information <u>Product:</u> Remarks: No data available	Remarks: Contact with eyes	may cause irritation.	
Respiratory or skin sensitisation No data available Gern 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 Stot - repeated exposure No data available Further information <u>Product:</u> Remarks: No data available	Remarks: Vanours may cau	se irritation to the eves respiratory system	n and the skin
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 STOT - repeated exposure No data available Further information <u>Product:</u> Remarks: No data available	Remarks. Vapours may cau	se initation to the eyes, respiratory system	
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 <u>Product:</u> Remarks: No data available	Respiratory or skin sensitisation	on	
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 <u>Product:</u> Remarks: No data available	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 <u>Product:</u> Remarks: No data available	Germ cell mutagenicity		
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: No data available	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 <u>Product:</u> Remarks: No data available	Carcinogenicity		
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	No data available		
STOT - single exposure No data available STOT - repeated exposure No data available Aspiration toxicity No data available Further information <u>Product:</u> Remarks: No data available	Reproductive toxicity		
No data available STOT - repeated exposure No data available Aspiration toxicity No data available Further information Product: Remarks: No data available	No data available		
STOT - repeated exposure No data available Aspiration toxicity No data available Further information <u>Product:</u> Remarks: No data available	STOT - single exposure		
No data available Aspiration toxicity No data available Further information Product: Remarks: No data available	No data available		
Aspiration toxicity No data available Further information <u>Product:</u> Remarks: No data available	STOT - repeated exposure		
No data available Further information <u>Product:</u> Remarks: No data available	No data available		
Further information <u>Product:</u> Remarks: No data available	Aspiration toxicity		
Product: Remarks: No data available	No data available		
Remarks: No data available	Further information		
	Product:		
SECTION 12. ECOLOGICAL INFORMATION	Remarks: No data availat	ble	
SECTION 12. ECOLOGICAL INFORMATION			
SECTION 12. ECOLOGICAL INFORMATION			
SECTION 12. ECOLOGICAL INFORMATION			
	SECTION 12. ECOLOGICAL IN	FORMATION	
Ecotoxicity	Ecotoxicity		
No data available	No data available		



Version 1.2	Revision Date 02/05/2018	Print Date 02/24/2020
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 Sectior Substances	-
Remarks	This product neither contains, nor with a Class I or Class II ODS as d Clean Air Act Section 602 (40 CFR + B).	efined by the U.S.
Additional ecological information	: No data available	

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	 Dispose of in accordance with local regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. 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: 49 CFR (USA): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

SAFETY DATA SHEET



ZEP STREAK-FREE GLASS CLEANER

Version 1.2

Revision Date 02/05/2018

Print Date 02/24/2020

Transportation Regulation: IATA (Cargo Air): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

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)
ammonia, aqueous solution	1336-21-6	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards	:	Flammable (gases, aerosols, liquids	, or solids)	
SARA 302		No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.		
SARA 313		The following components are subje established by SARA Title III, Section 2-butoxyethanol		els 2.001 %
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.		



Version 1.2

Revision Date 02/05/2018

Print Date 02/24/2020

The components of this product are reported in the following inventories:

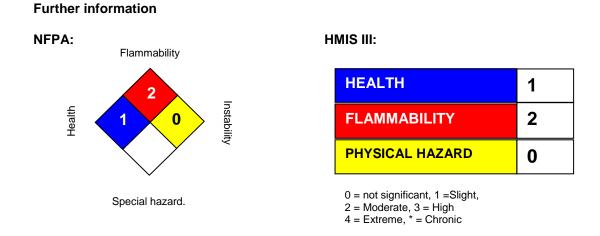
TSCA	On TSCA Inventory
DSL	All components of this product are on the Canadian DSL

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



OSHA - GHS Label Information:

- 3	: Warning: : Combustible liquid.
	 Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Wear protective gloves/ eye protection/ face protection. Response: 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.

Version:	1.2
Revision Date:	02/05/2018
Print Date:	02/24/2020

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



Version 1.2

Revision Date 02/05/2018

Print Date 02/24/2020

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.