## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP STREAK-FREE GLASS CLEANER

Material number : ZU1120128

**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 Emergency** | : | CHEMTREC: 800-424-9300 - All Calls Recorded.<br>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.

**Storage:**
P403 + P235 Store in a well-ventilated place. 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 [%] |
|---|---|---|
| 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.

## SECTION 5. FIREFIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Carbon dioxide (CO2)<br>Water spray jet<br>Alcohol-resistant foam<br>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)<br>Carbon monoxide<br>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.<br>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.<br>Ensure adequate ventilation.<br>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.<br>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).<br>Keep in suitable, closed containers for disposal. |

## SECTION 7. HANDLING AND STORAGE

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

Conditions for safe storage : No smoking.
Keep in a well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the 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<br>24 mg/m3 | NIOSH REL |
| | | TWA | 50 ppm<br>240 mg/m3 | OSHA Z-1 |
| | | TWA | 25 ppm<br>120 mg/m3 | OSHA P0 |
| | | PEL | 20 ppm<br>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 acid (BAA) | Urine | End of shift (As soon as possible after exposure ceases) | 200.mg/g Creatinine | 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
Remarks : 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

concentration of the dangerous substance at the work place.

| | | |
|---|---|---|
| Hygiene measures | : | When using do not eat or drink.<br>When using do not smoke.<br>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 |
| pH | : | 10.5 - 11.5 |
| Melting point/freezing point | : | No data available |
| Boiling point | : | 96.1 °C |
| Flash point | : | 76.7 °C<br>Method: closed cup |
| Evaporation rate | : | 1 |
| Upper explosion limit | : | No data available |
| Lower explosion limit | : | No data available |
| Vapour pressure | : | not determined<br>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. |

| | | |
|---|---|---|
| Possibility of hazardous reactions | : | Vapours may form explosive mixture with air.<br>No decomposition if stored and applied as directed. |
| Conditions to avoid | : | Heat, flames and sparks.<br>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. |
| **ACGIH** | Confirmed animal carcinogen with unknown relevance to humans<br>2-butoxyethanol 111-76-2<br>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<br>Method: Calculation method |
| Acute inhalation toxicity | : | Acute toxicity estimate : > 200 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour<br>Method: Calculation method |
| Acute dermal toxicity | : | Acute toxicity estimate : > 5,000 mg/kg<br>Method: Calculation method |

**Components:**

**2-butoxyethanol:**

Acute oral toxicity : LD50 Oral Rat: 880 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: 1,060 mg/kg

**Skin corrosion/irritation**

**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

**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**

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 | : | Dispose of in accordance with local regulations.<br>Do not contaminate ponds, waterways or ditches with chemical or used container.<br>The product should not be allowed to enter drains, water courses or the soil. |
| Contaminated packaging | : | Empty remaining contents.<br>Dispose of as unused product.<br>Do not re-use empty containers.<br>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

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 subject to reporting levels established by SARA Title III, Section 313:
2-butoxyethanol 111-76-2 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.

**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.

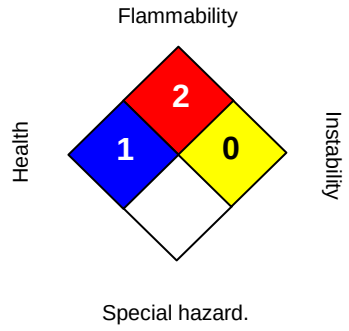
**Inventory Acronym and Validity Area Legend:**

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

## SECTION 16. OTHER INFORMATION

**Further information**

**NFPA:**




**HMIS III:**

| | |
|---|---|
| HEALTH | 1 |
| FLAMMABILITY | 2 |
| PHYSICAL HAZARD | 0 |

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

**OSHA - GHS Label Information:**

| | | |
|---|---|---|
| Signal word | : | **Warning:** |
| Hazard statements | : | Combustible liquid. |
| Precautionary statements | : | **Prevention:** Keep away from heat/sparks/open flames/hot surfaces. No smoking. Wear protective gloves/ eye protection/ face protection.<br>**Response:** In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.<br>**Storage:** Store in a well-ventilated place. Keep cool.<br>**Disposal:** Dispose of contents/container in accordance with local regulation. |

| | |
|---|---|
| Version: | 1.2 |
| Revision Date: | 02/05/2018 |
| Print Date: | 12/10/2019 |

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