

**BZ7458 GLASS CLEANER ZU112032 12QT/CS**

Version 1.0

Revision Date 03/03/2015

Print Date 11/18/2015

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : BZ7458 GLASS CLEANER ZU112032 12QT/CS

Material number : 00000000001041435

**Manufacturer or supplier's details**

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  
Emergency** : CHEMTREC: 800-424-9300 - All Calls Recorded.  
In the District of Columbia 202-483-7616

**SECTION 2. HAZARDS IDENTIFICATION**
**Emergency Overview**

Appearance	liquid
Colour	dark, blue
Odour	pleasant

**GHS Classification**

Flammable liquids : Category 4

**GHS Label element**

Signal word : Warning

Hazard statements : H227 Combustible liquid.

Precautionary statements : **Prevention:**  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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 for extinction.

**Storage:**  
P403 + P235 Store in a well-ventilated place. Keep cool.

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

**Potential Health Effects**

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**Carcinogenicity:**

<b>IARC</b>	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.
<b>ACGIH</b>	Confirmed animal carcinogen with unknown relevance to humans 2-butoxyethanol 111-76-2 ethanol 64-17-5
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
<b>NTP</b>	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.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

Chemical Name	CAS-No.	Concentration [%]
2-butoxyethanol	111-76-2	>= 5 - < 10
ethanol	64-17-5	>= 1 - < 5

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**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.
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. If on clothes, remove clothes.
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.

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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>)  
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 (CO<sub>2</sub>)  
Carbon monoxide  
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
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**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 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 : 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.
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**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.  
Always replace cap after use.  
Take precautionary measures against static discharges.
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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 kept upright to prevent leakage.  
 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 24 mg/m <sup>3</sup>	NIOSH REL
		TWA	50 ppm 240 mg/m <sup>3</sup>	OSHA Z-1
		TWA	25 ppm 120 mg/m <sup>3</sup>	OSHA P0
ethanol	64-17-5	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	OSHA P0

**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	ACGIH BEI
Remarks: Creatinine						

**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

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Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	: Ensure that eyewash stations and safety showers are close to the workstation location. 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. 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
pH	: 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/cm <sup>3</sup>
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

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**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

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**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 40 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:****ethanol:**

Acute oral toxicity	: LD50 Oral rat: 7,060 mg/kg
Acute inhalation toxicity	: LC50 rat: 124.7 mg/l Exposure time: 4 h

**Skin corrosion/irritation****Product:**

Remarks: May cause skin irritation and/or dermatitis.

**Serious eye damage/eye irritation****Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

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**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**2-butoxyethanol:  
ethanol:****STOT - single exposure**

no data available

**STOT - repeated exposure**

no data available

**Aspiration toxicity**

no data available

**Further information****Product:**

Remarks: no data available

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential****Product:**Partition coefficient: n- : Remarks: no data available  
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

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Remarks	Stratospheric Ozone - CAA Section 602 Class I Substances 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	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life.

**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

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**SECTION 15. REGULATORY INFORMATION**
**EPCRA - Emergency Planning and Community Right-to-Know Act**
**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ammonia, anhydrous	7664-41-7	100	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ammonia, anhydrous	7664-41-7	100	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 311/312 Hazards** : Fire Hazard

**SARA 302** : The following components are subject to reporting levels established by SARA Title III, Section 302:  
 ammonia, anhydrous 7664-41-7 0.5411 %

**SARA 313** : 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** 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:**

<b>TSCA</b>	On TSCA Inventory
<b>DSL</b>	This product contains one or several components that are not on the Canadian DSL nor NDSL.
<b>AICS</b>	Not in compliance with the inventory
<b>NZIoC</b>	Not in compliance with the inventory
<b>PICCS</b>	Not in compliance with the inventory
<b>IECSC</b>	Not in compliance with the inventory

**Inventory Acronym and Validity Area Legend:**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

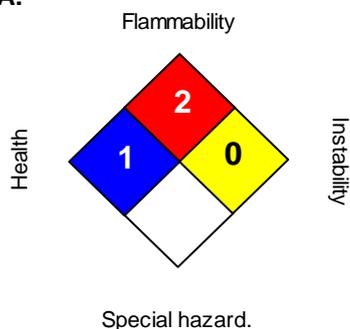
**SECTION 16. OTHER INFORMATION**

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**Further information****NFPA:****HMIS III:**

<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>2</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

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

**OSHA GHS Label Information:**

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

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