

SAFETY DATA SHEET



ZEP MIRROR & GLASS CLEANER AERO

Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP MIRROR & GLASS CLEANER AERO

Material number : 00000000000009800

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** : 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

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	clear, 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 : **Prevention:**
 P251 Pressurized container: Do not pierce or burn, even after use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Storage:
 P410 + P403 Protect from sunlight. Store in a well-ventilated place.

ZEP MIRROR & GLASS CLEANER AERO

Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

P412 Do not expose to temperatures exceeding 50 °C/ 122 °F.

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 [%]
propane	74-98-6	>= 1 - < 5
ethanol	64-17-5	>= 1 - < 5
butane	106-97-8	>= 1 - < 5
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.
- 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.
If on skin, rinse well with water.
If on clothes, remove clothes.
Wash off immediately with plenty of water for at least 15 minutes.
- In case of eye contact : Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
Do NOT induce vomiting.
- 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.

ZEP MIRROR & GLASS CLEANER AERO

Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- 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 : 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.
- 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.
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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.
Dispose of rinse water in accordance with local and national regulations.
Do not breathe vapours or spray mist.
Provide sufficient air exchange and/or exhaust in work rooms.
- Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
Keep in a cool, well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
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ZEP MIRROR & GLASS CLEANER AERO

Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

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
propane	74-98-6	TWA	1,000 ppm 1,800 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m ³	OSHA P0
		PEL	1,000 ppm 1,800 mg/m ³	CAL PEL
ethanol	64-17-5	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m ³	OSHA P0
		STEL	1,000 ppm	ACGIH
		PEL	1,000 ppm 1,900 mg/m ³	CAL PEL
butane	106-97-8	TWA	800 ppm 1,900 mg/m ³	NIOSH REL
		TWA	800 ppm 1,900 mg/m ³	OSHA P0
		PEL	800 ppm 1,900 mg/m ³	CAL PEL
		STEL	1,000 ppm	ACGIH
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m ³	NIOSH REL
		TWA	50 ppm 240 mg/m ³	OSHA Z-1
		TWA	25 ppm 120 mg/m ³	OSHA P0
		PEL	20 ppm 97 mg/m ³	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)	200.mg/g Creatinine	ACGIH BEI

ZEP MIRROR & GLASS CLEANER AERO

Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

				ceases)		
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Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
In the case of dust or aerosol formation use respirator with an approved filter.

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

Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.

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 : Aerosol containing a liquefied gas

Colour : clear, colourless

Odour : pleasant

Odour Threshold : No data available

pH : 10 - 11

Melting point/freezing point : No data available

Boiling point : 96.11 °C

Flash point :
Not applicable

Evaporation rate : > 1

Flammability (solid, gas) : Not classified as a flammability hazard

Upper explosion limit : No data available

Lower explosion limit : No data available

ZEP MIRROR & GLASS CLEANER AERO

Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.95 g/cm ³
Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: No data available
Heat of combustion	: < 20 kJ/g

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.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Nitrogen oxides (NO _x)

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:

ZEP MIRROR & GLASS CLEANER AERO

Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

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 ethanol 64-17-5 2-butoxyethanol 111-76-2
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
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 120.19 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
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
Test atmosphere: vapour

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

Respiratory or skin sensitisation

ZEP MIRROR & GLASS CLEANER AERO

Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

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

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

Components:**ethanol :**

Partition coefficient: n-octanol/water : Remarks: No data available

butane :

Partition coefficient: n-octanol/water : Pow: 2.89

Mobility in soil

No data available

ZEP MIRROR & GLASS CLEANER AERO

Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

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 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.
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):
ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):
UN1950, AEROSOLS, 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

ZEP MIRROR & GLASS CLEANER AERO

Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

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 : Gases under pressure

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	1.248 %
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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:

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

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

ZEP MIRROR & GLASS CLEANER AERO

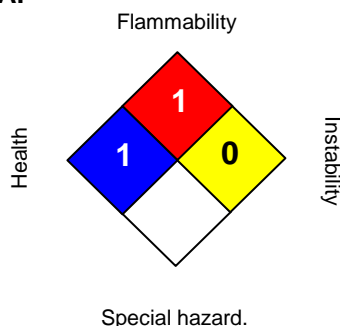
Version 4.0

Revision Date 07/31/2019

Print Date 02/13/2020

Further information

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	2
PHYSICAL HAZARD	3

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

OSHA - GHS Label Information:

Hazard pictograms



Signal word

: **Warning:**

Hazard statements

: Contains gas under pressure; may explode if heated.

Precautionary statements

: **Prevention:** Pressurized container: Do not pierce or burn, even after use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Storage: Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50 °C/ 122 °F.

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

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