

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A07325 ZEP 40 014401_12CS 20N18

Material number : 00000000000014401

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.
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, clear
Odour	alcohol-like, slight

GHS Classification

Gases under pressure : Liquefied gas

Eye irritation : Category 2A

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H280 Contains gas under pressure; may explode if heated.
H319 Causes serious eye irritation.

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

Precautionary statements : **Prevention:**
 P264 Wash skin thoroughly after handling.
 P280 Wear eye protection/ face protection.
Response:
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
 P403 Store in a well-ventilated place.
 P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
ethanol	64-17-5	>= 10 - < 20
butane	106-97-8	>= 1 - < 5
2-butoxyethanol	111-76-2	>= 1 - < 5
propane	74-98-6	>= 1 - < 5

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

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
 Show this safety data sheet to the doctor in attendance.
 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 : Wash off immediately with plenty of water for at least 15 minutes.
 If skin irritation persists, call a physician.

In case of eye contact : Remove contact lenses.
 Protect unharmed eye.
 Keep eye wide open while rinsing.
 If eye irritation persists, consult a specialist.
 If in eyes, rinse with water for 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.

Most important symptoms : Effects are immediate and delayed.

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

and effects, both acute and delayed

Symptoms may include irritation, redness, pain, and rash.
Causes serious eye irritation.
Review section 2 of SDS to see all potential hazards.

Notes to physician

: Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media

: Water spray jet
Carbon dioxide (CO₂)
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

: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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.

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

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.
Always replace cap after use.
Dispose of rinse water in accordance with local and national regulations.
Avoid exposure - obtain special instructions before use.
Take precautionary measures against static discharges.
Do not breathe vapours or spray mist.
- 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.
Observe label precautions.
Keep in a dry, cool and well-ventilated place.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Do not freeze.
Strong 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
ethanol	64-17-5	TWA	1,000 ppm	ACGIH
			1,000 ppm 1,900 mg/m ³	NIOSH REL
			1,000 ppm 1,900 mg/m ³	OSHA Z-1
			1,000 ppm 1,900 mg/m ³	OSHA P0
			1,000 ppm	ACGIH
			1,000 ppm 1,900 mg/m ³	CAL PEL
butane	106-97-8	TWA	800 ppm 1,900 mg/m ³	NIOSH REL
			800 ppm 1,900 mg/m ³	OSHA P0
			800 ppm 1,900 mg/m ³	CAL PEL
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
			5 ppm 24 mg/m ³	NIOSH REL
			50 ppm 240 mg/m ³	OSHA Z-1
			25 ppm	OSHA P0

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

			120 mg/m3	
		PEL	20 ppm 97 mg/m3	CAL PEL
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m3	OSHA P0
		PEL	1,000 ppm 1,800 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 : Tightly fitting safety goggles

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 : colourless, clear

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

Odour	: alcohol-like, slight
Odour Threshold	: No data available
pH	: 10.5 - 11.5
Melting point/freezing point	: Not applicable
Boiling point	: Not applicable
Flash point	: Not applicable
Evaporation rate	: 1 n-Butyl Acetate = 1.0
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.1 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	: Not applicable
Heat of combustion	: 7.94 kJ/g

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air. No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition	: Carbon monoxide, carbon dioxide and unburned

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

products

hydrocarbons (smoke).

SECTION 11. TOXICOLOGICAL INFORMATION
Potential Health Effects

Aggravated Medical Condition : None known.
 Symptoms of Overexposure : Effects are immediate and delayed.
 Symptoms may include irritation, redness, pain, and rash.

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
 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 : 60 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:

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

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: Severe eye irritation

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

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

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

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	: 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	: 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
--

SAFETY DATA SHEET



A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

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

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 : Gases under pressure
Serious eye damage or eye irritation

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 2.5 %

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

reproductive harm.

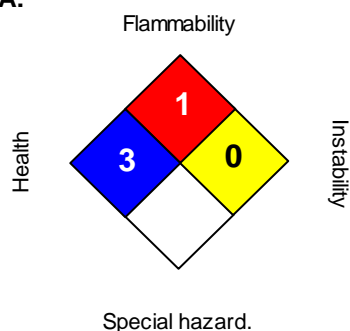
The components of this product are reported in the following inventories:

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
Further information
NFPA:

HMIS III:

HEALTH	2
FLAMMABILITY	1
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. Causes serious eye irritation.

Precautionary statements

: **Prevention:** Wash skin thoroughly after handling. Wear eye protection/ face protection.
Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.
Storage: Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Version:

2.3

A07325 ZEP 40 014401_12CS 20N18

Version 2.3

Revision Date 02/14/2018

Print Date 09/23/2021

Revision Date:	02/14/2018
Print Date:	09/23/2021

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 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.