SAFETY DATA SHEET

A07870 ZEP 40 LV 322901 20N18

Version 2.0 Revision Date 05/25/2018 Print Date 04/02/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A07870 ZEP 40 LV 322901 20N18
Material number : 00000000000322901

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

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Aerosol containing a liquefied gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>Odour</td>
<td>mint-like</td>
</tr>
</tbody>
</table>

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:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Pressurized container: Do not pierce or burn, even after use.

Storage:
P410 + P403 Protect from sunlight. Store in a well-ventilated place.
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**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>butane</td>
<td>106-97-8</td>
<td>&gt;= 3 - &lt; 5</td>
</tr>
<tr>
<td>ethanol</td>
<td>64-17-5</td>
<td>&gt;= 1 - &lt; 3</td>
</tr>
</tbody>
</table>

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

### SECTION 4. FIRST AID MEASURES

**General advice:**
Do not leave the victim unattended.
Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.

**If inhaled:**
Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.

**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:**
If in eyes, rinse with water for 15 minutes.
Remove contact lenses.
Protect unharmed eye.
If eye irritation persists, consult a specialist.
Keep eye wide open while rinsing.

**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.
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:
- Dry chemical
- Water spray jet
- Carbon dioxide (CO2)
- Alcohol-resistant foam

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:
- Standard procedure for chemical fires.
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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.
- Remove all sources of ignition.
- Evacuate personnel to safe areas.
- 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.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling:
- Avoid exposure - obtain special instructions before use.
- For personal protection see section 8.
- Avoid contact with skin and eyes.
Smoking, eating and drinking should be prohibited in the application area. Do not breathe vapours or spray mist. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. Always replace cap after use.

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. No smoking.

Materials to avoid: Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>butane</td>
<td>106-97-8</td>
<td>TWA</td>
<td>800 ppm 1,900 mg/m3</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>800 ppm 1,900 mg/m3</td>
<td>OSHA P0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PEL</td>
<td>800 ppm 1,900 mg/m3</td>
<td>CAL PEL</td>
</tr>
<tr>
<td>ethanol</td>
<td>64-17-5</td>
<td>TWA</td>
<td>1,000 ppm 1,900 mg/m3</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,900 mg/m3</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,900 mg/m3</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,900 mg/m3</td>
<td>OSHA P0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>1,000 ppm 1,900 mg/m3</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PEL</td>
<td>1,000 ppm 1,900 mg/m3</td>
<td>CAL PEL</td>
</tr>
</tbody>
</table>

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
Ensure that eyewash stations and safety showers are close to the workstation location.
Eye wash bottle 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: Wash hands before breaks and at the end of workday.
When using do not eat, drink or smoke.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Aerosol containing a liquefied gas

Colour: white

Odour: mint-like

Odour Threshold: No data available

pH: No data available

Melting point/freezing point: No data available

Boiling point: No data available

Flash point: Not applicable

Evaporation rate: No data available

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

Upper explosion limit: No data available

Lower explosion limit: No data available

Vapour pressure: No data available

Relative vapour density: No data available

Density: No data available

Solubility(ies)

Water solubility: soluble

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: 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 products: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

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 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

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

Skin corrosion/irritation  
No data available

Serious eye damage/eye irritation  
No data available

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  
Components: butane

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

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

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):
UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

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):
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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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ammonia, aqueous solution</td>
<td>1336-21-6</td>
<td>1000</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Calculated RQ exceeds reasonably attainable upper limit.

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 : The following components are subject to reporting levels established by SARA Title III, Section 302:
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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
WARNING: This product can expose you to chemicals including 2,2'-iminodiethanol, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL</td>
<td>All components of this product are on the Canadian DSL Inventory</td>
</tr>
<tr>
<td>TSCA</td>
<td>On TSCA Inventory</td>
</tr>
</tbody>
</table>

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:**
- Health: 1
- Flammability: 2
- Instability: 0
- Special hazard: 

**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:

- **Signal word:** Warning
- **Hazard pictograms:**
- **Hazard statements:**
  - Contains gas under pressure; may explode if heated.

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

  - 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.
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.