SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name: ZEP DRIVEWAY & CONCRETE PRESSURE WASH CON
Material number: ZUBMC128

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: Pressure Wash

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

<table>
<thead>
<tr>
<th>Appearance</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>light yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

GHS Classification

Corrosive to metals: Category 1
Skin corrosion: Category 1
Serious eye damage: Category 1

GHS label elements

Hazard pictograms: 

Signal word: Danger

Hazard statements: H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.
Precautionary statements:

**Prevention:**
P234 Keep only in original container.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.

**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>sodium hydroxide</td>
<td>1310-73-2</td>
<td>&gt;= 5 - &lt; 10</td>
</tr>
<tr>
<td>Alcohols, C9-11, ethoxylated</td>
<td>68439-46-3</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts</td>
<td>68439-57-6</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>

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

### SECTION 4. FIRST AID MEASURES

**General advice:** Move out of dangerous area. Consult a physician. 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:** Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
Wash off immediately with plenty of water for at least 15 minutes.
Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.
If skin irritation persists, call a physician.

In case of eye contact:
- Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- Remove contact lenses.
- Protect unharmed eye.
- Keep eye wide open while rinsing.
- If eye irritation persists, consult a specialist.

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 are dependent on exposure (dose, concentration, contact time).
- Effects are immediate and delayed.
- Symptoms may include blistering, irritation, burns, and pain.
- Causes severe skin burns and eye damage.
- 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
- Alcohol-resistant foam
- Carbon dioxide (CO2)

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
- Sulphur oxides

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
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).
- Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling:
- Avoid exposure - obtain special instructions before use.
- Avoid contact with skin and eyes.
- For personal protection see section 8.
- 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.

Conditions for safe storage:
- 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:
- Keep away from oxidizing agents and strongly acid or alkaline materials.
- Do not freeze.

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)</th>
<th>Control parameters / Basis</th>
</tr>
</thead>
</table>

4 / 12
SAFETY DATA SHEET

ZEP DRIVEWAY & CONCRETE PRESSURE WASH CON

Version 1.4  Revision Date 03/06/2020  Print Date 12/11/2020

<table>
<thead>
<tr>
<th>Material</th>
<th>Permissible concentration</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium hydroxide</td>
<td>2 mg/m³</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>2 mg/m³</td>
<td>TWA</td>
</tr>
<tr>
<td></td>
<td>2 mg/m³</td>
<td>C</td>
</tr>
</tbody>
</table>

ACGIH: 2 mg/m³
NIOSH REL: 2 mg/m³
OSHA Z-1: 2 mg/m³
OSHA P0: 2 mg/m³
CAL PEL: 2 mg/m³

**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**

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

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing problems.

**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.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance**: liquid

**Colour**: light yellow

**Odour**: characteristic

**Odour Threshold**: No data available

**pH**: 13 - 14

**Melting point/freezing point**: No data available

**Boiling point**: 98.9 °C

**Flash point**: does not flash
Evaporation rate: 1

Upper explosion limit: No data available
Lower explosion limit: No data available
Vapour pressure: No data available
Relative vapour density: No data available
Density: 1.06 g/cm³

Solubility(ies)
Water solubility: soluble in cold water, soluble in hot water
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

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: Not applicable
Incompatible materials: Oxidizing agents
Acids
This product contains sodium hydroxide or potassium hydroxide that may corrode some soft metals and may react with tin, zinc, aluminum to form hydrogen gas.

Hazardous decomposition products: Carbon oxides
Sulphur oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical: None known.
Condition
Symptoms of Overexposure: Effects are dependent on exposure (dose, concentration, contact time). Effects are immediate and delayed. Symptoms may include blistering, irritation, burns, and pain.

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
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

Components:
sodium hydroxide:
Acute dermal toxicity: Acute toxicity estimate Rabbit: 1,350 mg/kg

Alcohols, C9-11, ethoxylated:
Acute oral toxicity: LD50 Oral Rat: 1,400 mg/kg

Skin corrosion/irritation
Product:
Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation
Product:
Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No data available
SAFETY DATA SHEET

ZEP DRIVEWAY & CONCRETE PRESSURE WASH CON

Version 1.4 Revision Date 03/06/2020 Print Date 12/11/2020

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

Components:
sodium hydroxide:
Toxicity to fish: LC50 (Gambusia affinis (Mosquito fish)): 125 mg/l
Exposure time: 96 h
Test Method: static test

LC50 (Oncorhynchus tshawytscha (chinook salmon)): 152 mg/l
Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 40 mg/l
Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 34 - 47 mg/l
Exposure time: 48 h

EC50 (Crangon crangon (shrimp)): 33 - 100 mg/l
Exposure time: 48 h

Persistence and degradability
No data available

Bioaccumulative potential
Product: Remarks: No data available
Partition coefficient: n-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 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

Components:
sodium hydroxide:

Additional ecological information:
Harmful to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues:
Dispose of in accordance with local regulations.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.

Contaminated packaging:
Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IMDG (Vessel):
UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IATA (Cargo Air):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IATA (Passenger Air):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: TDG (Canada):
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>sodium hydroxide</td>
<td>1310-73-2</td>
<td>1000 *</td>
<td></td>
</tr>
</tbody>
</table>

*: 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 : Corrosive to metals
Skin corrosion or irritation
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 : 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 ethylbenzene, 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:

DSL All components of this product are on the Canadian DSL
SAFETY DATA SHEET

ZEP DRIVEWAY & CONCRETE PRESSURE WASH CON

Version 1.4  Revision Date 03/06/2020  Print Date 12/11/2020

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:
Flammability
Health
3 0
Instability

HMIS III:

HEALTH 3
FLAMMABILITY 0
PHYSICAL HAZARD 0

Special hazard.

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

OSHA - GHS Label Information:

Hazard pictograms:

Signal word: Danger
Hazard statements: May be corrosive to metals. Causes severe skin burns and eye damage.
Precautionary statements:

Prevention: Keep only in original container. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

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.

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