

Version 3.0

Revision Date 02/07/2018

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| Material name | : | ZEP OVEN BRITE 1 CS 12 QTS |
|------------------------------|------|---|
| Material number | : | 00000000000104801 |
| Manufacturer or supplier's d | leta | ils |
| 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 : Food and Beverage Facility Maintenance

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

| Appearance | liquid |
|------------|-------------------|
| Colour | colourless, clear |
| Odour | mild |

GHS Classification

| Skin corrosion Serious eye damage | : Category 1 : Category 1 |
|--------------------------------------|---|
| GHS label elements | |
| Hazard pictograms | |
| Signal word | : Danger |
| Hazard statements | : H314 Causes severe skin burns and eye damage. |
| Precautionary statements | Prevention: 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. |



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| | P303 + P361 + P353 IF ON SKIN immediately all contaminated clor water/shower. P304 + P340 + P310 IF INHALEI and keep comfortable for breathin POISON CENTER/doctor. P305 + P351 + P338 + P310 IF I water for several minutes. Remo- and easy to do. Continue rinsing. CENTER/doctor. P363 Wash contaminated clothin Disposal: P501 Dispose of contents/contain regulation. | thing. Rinse skin with D: Remove person to fresh air ng. Immediately call a N EYES: Rinse cautiously with ve contact lenses, if present Immediately call a POISON ng before reuse. |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

| Chemical name | CAS-No. | Concentration [%] |
|---------------------------|-----------|-------------------|
| sodium hydroxide | 1310-73-2 | >= 5 - < 10 |
| 2-(2-butoxyethoxy)ethanol | 112-34-5 | >= 1 - < 5 |
| propane-1,2-diol | 57-55-6 | >= 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. 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. |



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| | If eye irritation persists, consult a s | specialist. |
| If swallowed | Clean mouth with water and drink afterwards plenty of water. Keep respiratory tract clear. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. | |
| Most important symptoms and effects, both acute and delayed | Effects are immediate and delayed Symptoms may include blistering, Effects are dependent on exposur contact time). Causes severe skin burns and eye Causes serious eye damage. Review section 2 of SDS to see al | irritation, burns, and pain. e (dose, concentration, e damage. |
| Notes to physician | : Treat symptomatically. Symptoms | s may be delayed. |

SECTION 5. FIREFIGHTING MEASURES

| Suitable extinguishing media | 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 wa courses. | ater |
| 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. must not be discharged into drains. Fire residues and contaminated fire extinguishing water r be disposed of in accordance with local regulations. | |
| Special protective equipment for firefighters | Wear self-contained breathing apparatus for firefighting if necessary. | i |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment. |
|---|---|
| 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. |



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| Methods and materials for containment and cleaning up | : Neutralise with acid. Soak up with inert absorbent mate acid binder, universal binder, sawo | |

Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

| Advice on safe handling | : | Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. 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. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. This product is formulated for use on hard metal surfaces. This product does contain a reducing agent(s) that may corrode soft metals. This product should be stored in its original packaging or containers of similar construction, and not in metal vessels. |
| Materials to avoid | : | Keep away from oxidizing agents and strongly acid or alkaline materials. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---------------------------|-----------|---|---|-----------|
| sodium hydroxide | 1310-73-2 | C | 2 mg/m3 | ACGIH |
| | | С | 2 mg/m3 | NIOSH REL |
| | | TWA | 2 mg/m3 | OSHA Z-1 |
| | | С | 2 mg/m3 | OSHA P0 |
| | | C | 2 mg/m3 | CAL PEL |
| 2-(2-butoxyethoxy)ethanol | 112-34-5 | TWA (Inhalable fraction and vapor) | 10 ppm | ACGIH |
| propane-1,2-diol | 57-55-6 | TWA | 10 mg/m3 | US WEEL |

Engineering measures : effective ventilation in all processing areas



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| Personal protective equipr | nent | |
| Respiratory protection | : Use respiratory protection unless a ventilation is provided or exposure that exposures are within recommended or exposures are within re | assessment demonstrates |
| Hand protection | | |
| Material Remarks | Protective gloves The suitability for a specific workplay with the producers of the protective | |
| Eye protection | : Ensure that eyewash stations and the workstation location. Tightly fitting safety goggles Wear face-shield and protective su problems. | |
| Skin and body protection | : Impervious clothing Choose body protection according concentration of the dangerous sul | |
| 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 | : | colourless, clear |
| Odour | : | mild |
| Odour Threshold | : | No data available |
| рН | : | 13 - 14 |
| Melting point/freezing point | : | No data available |
| Boiling point | : | not determined |
| Flash point | : | Not applicable |
| Evaporation rate | : | No data available |
| Upper explosion limit | : | No data available |
| Lower explosion limit | : | No data available |
| Vapour pressure | : | not determined |
| Relative vapour density | : | No data available |
| Density | : | 1.089 g/cm3 |
| Solubility(ies) | | |
| Water colubility | | 1 1 1 . |
| Water solubility | : | soluble |



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| Partition coefficient: n- octanol/water | : No data available |
|--|---------------------|
| Auto-ignition temperature | : not determined |
| Thermal decomposition | : No data available |
| Viscosity | |
| Viscosity, kinematic | : 989 mm2/s (20 °C) |

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 | : No data available |
| Incompatible materials | : Acids Reducing agents Oxidizing agents 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 |

SECTION 11. TOXICOLOGICAL INFORMATION

| Potential | Health | Effects |
|-----------|--------|---------|
|-----------|--------|---------|

| Aggravated Medical Condition | : None known. |
|---------------------------------|--|
| Symptoms of Overexposure | : Effects are immediate and delayed. Symptoms may include blistering, irritation, burns, and pain. Effects are dependent on exposure (dose, concentration, contact time). |
| 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 | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential |



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|---|---|--|
| OSHA NTP | carcinogen by ACGIH. No component of this product preser equal to 0.1% is on OSHA's list of re No component of this product preser equal to 0.1% is identified as a know by NTP. | gulated carcinogens. It at levels greater than or |
| Acute toxicity Components: sodium hydroxide: Acute dermal toxicity | : Acute toxicity estimate Rabbit: 1,3 | 350 mg/kg |
| Skin corrosion/irritation | | |
| Product: Remarks: Extremely corrosive | e and destructive to tissue. | |
| Serious eye damage/eye irritatio | n | |
| Product: | | |
| Remarks: May cause irrevers | ible eye damage. | |
| Respiratory or skin sensitisatior | ı | |
| 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 | | |
| <u>Product:</u> | _ | |
| Remarks: No data available | e | |
| | | |
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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available Bioaccumulative potential

Product:

| - Toudott | |
|---|--|
| Partition coefficient: n- octanol/water <u>Components:</u> 2-(2-butoxyethoxy)ethanol : | : Remarks: No data available |
| Partition coefficient: n- octanol/water propane-1,2-diol : | : Pow: 1 |
| Partition coefficient: n- octanol/water | : log Pow: -1.07 |
| Mobility in soil | |
| No data available | |
| Other adverse effects | |
| No data available <u>Product:</u> | |
| 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 |

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. |



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SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): ORM-D, CONSUMER COMMODITY

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

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

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

Transportation Regulation: TDG (Canada): UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, II - 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) |
|------------------|-----------|-----------------------|--------------------------------|
| sodium hydroxide | 1310-73-2 | 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 | : | 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. |



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| SARA 313 | : The following components are subject to reporting levels established by SARA Title III, Section 313: | | |
| | 2-(2-butoxyethoxy)ethanol 2-butoxyethanol | 112-34-52.954 %111-76-20.045 % | |
| California Prop. 65 | | | |
| | WARNING: This product can expose you to chemicals including methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. | | |

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

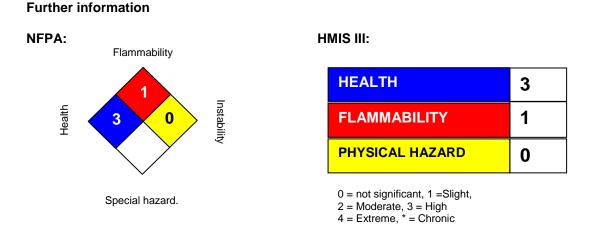
| DSL | All components of this product are on the Canadian DSL |
|------|--|
| TSCA | On TSCA Inventory |

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



OSHA - GHS Label Information:

Hazard pictograms





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|---|---|------------------------|--|
| Signal word | : Danger: | | |
| Hazard statements Precautionary statements | Causes severe skin burns and eye damage. | | |
| | Prevention: 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. | | |
| | Disposal: Dispose of contents/container in accordance | with local regulation. | |

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