

Version 2.0

Revision Date 08/10/2015

Print Date 10/18/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| Material name | : | CLEAN 'EMS UPHOLSTERY TOWELS 6 TUBS/CS |
|------------------------------|------|---|
| Material number | : | 637901C |
| Manufacturer or supplier's o | leta | ils |
| Company | : | Zep Inc. |
| Address | : | 1310 Seaboard Industrial Blvd., NW Atlanta, GA 30318 |
| 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 | |

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

| Appearance | sheets |
|------------|--------|
| Colour | clear |
| Odour | slight |

GHS Classification

| Eye irritation GHS Label element | : Category 2A |
|-------------------------------------|---|
| Hazard pictograms | |
| Signal word | : Warning |
| Hazard statements | : H319 Causes serious eye irritation. |
| 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. |

Potential Health Effects



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|------------------|--|-----------------------|
| | | |
| Carcinogenicity: | | |
| IARC | No component of this product present equal to 0.1% is identified as probable human carcinogen by IARC. | |
| ACGIH | Confirmed animal carcinogen with un humans | known relevance to |
| | 2-butoxyethanol | 111-76-2 |
| OSHA | No component of this product present equal to 0.1% is identified as a carcin carcinogen by OSHA. | 3 |
| NTP | No component of this product present equal to 0.1% is identified as a known by NTP. | |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

| Chemical Name | CAS-No. | Concentration [%] |
|---------------------------|----------|-------------------|
| 2-(2-butoxyethoxy)ethanol | 112-34-5 | >= 10 - < 20 |
| 2-butoxyethanol | 111-76-2 | >= 1 - < 5 |

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 | If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes. |
| In case of eye contact | Immediately flush eye(s) with plenty of water. 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. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. |

SECTION 5. FIREFIGHTING MEASURES

| Suitable extinguishing media | : Dry chemical |
|------------------------------|----------------|
|------------------------------|----------------|



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| Alcohol-resistant foam Carbon dioxide (CO2) | |
| : High volume water jet | |
| : Carbon dioxide (CO2) Carbon monoxide Smoke | |
| : Use extinguishing measures that circumstances and the surroundir | |
| : Standard procedure for chemical | fires. |
| : Wear self-contained breathing ap necessary. | oparatus for firefighting if |
| | Alcohol-resistant foam Carbon dioxide (CO2) High volume water jet Carbon dioxide (CO2) Carbon monoxide Smoke Use extinguishing measures that circumstances and the surroundin Standard procedure for chemical Wear self-contained breathing approximation |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment. Avoid dust formation. Avoid breathing dust. |
|---|--|
| Environmental precautions | : Prevent further leakage or spillage if safe to do so. |
| Methods and materials for containment and cleaning up | : Keep in suitable, closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

| Advice on safe handling | Avoid formation of respirable particles. 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. 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. Electrical installations / working materials must comply with the technological safety standards. |
| Materials to avoid | : Store and keep away from, oxidizing agents and acids. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of | Control parameters / | Basis |
|------------|---------|------------------------|-------------------------|-------|
| | | exposure) | Permissible | |



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|-----------------|----------|--------------------------|---------------------|-----------------------|--|
| | | | concentration | | |
| 2-butoxyethanol | 111-76-2 | TWA | 20 ppm | ACGIH | |
| | | TWA | 5 ppm 24 mg/m3 | NIOSH REL | |
| | | TWA | 50 ppm 240 mg/m3 | OSHA Z-1 | |

Biological occupational exposure limits

| Component | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|---------------------|----------|----------------------------|---------------------|--|---------------------------|-----------|
| 2-BUTOXYE THANOL | 111-76-2 | Butoxyacetic acid (BAA) | Urine | End of shift (As soon as possible after exposure ceases) | 200 mg/g | ACGIH BEI |
| Remarks: Creatinine | | | | | | |

TWA

25 ppm

120 mg/m3

Personal protective equipment

| Respiratory protection | No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment. |
|--------------------------|--|
| Hand protection | |
| Remarks | : The suitability for a specific workplace should be discussed with the producers of the protective gloves. |
| Eye protection | : Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems. |
| Skin and body protection | : 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 | : sheets |
|-----------------|----------------------------------|
| Colour | : clear |
| Odour | : slight |
| Odour Threshold | : No data available |
| рН | : 9 - 9.5, (as aqueous solution) |



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| Melting point/freezing point | : No data available | |
| Boiling point | : Not applicable | |
| Flash point | : 87.77 °C Method: TCC | |
| Evaporation rate | : No data available | |
| Upper explosion limit | : No data available | |
| Lower explosion limit | : No data available | |
| Vapour pressure | : No data available | |
| Relative vapour density | : No data available | |
| Density | : Not applicable | |
| Solubility(ies) | | |
| Water solubility | : Not applicable | |
| Solubility in other solvents | : 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 | : No data available |
| Incompatible materials | : Not applicable |
| Hazardous decomposition products | : Carbon dioxide (CO2) Nitrogen oxides (NOx) Carbon monoxide |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:



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| Acute oral toxicity | : Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method | |
| Acute inhalation toxicity | : Acute toxicity estimate : > 10 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 | |
| Skin corrosion/irritation | | |
| Product: | | |
| Remarks: May cause skin irrita | ation and/or dermatitis. | |
| Serious eye damage/eye irritatio | n | |
| 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 | | |
| 2-(2-butoxyethoxy)ethanol: 2-butoxyethanol: | | |
| STOT - single exposure | | |
| No data available | | |
| STOT - repeated exposure | | |
| No data available | | |
| Aspiration toxicity | | |
| No data available | | |
| Further information | | |
| Product: | | |
| Remarks: No data available | | |
| | | |

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SECTION 12. ECOLOGICAL INFORMATION

| Ecotoxicity | |
|---|--|
| No data available | |
| Persistence and degradability | |
| No data available Bioaccumulative potential | |
| Product: | |
| octanol/water <u>Components:</u> 2-(2-butoxyethoxy)ethanol: | Remarks: No data available |
| Partition coefficient: n- octanol/water | : Pow: 1 |
| 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. |

SECTION 14. TRANSPORT INFORMATION



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Transportation Regulation: 49 CFR (USA): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: TDG (Canada): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

SECTION 15. REGULATORY INFORMATION

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 Hazard | Is : Acute Health Hazard | | |
|---|---|--|--|
| 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 | 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: | | | |
| TSCA DSL | On TSCA Inventory This product contains the following components that are not on the Canadian DSL nor NDSL. | | |
| AICS | On the inventory, or in compliance with the inventory | | |



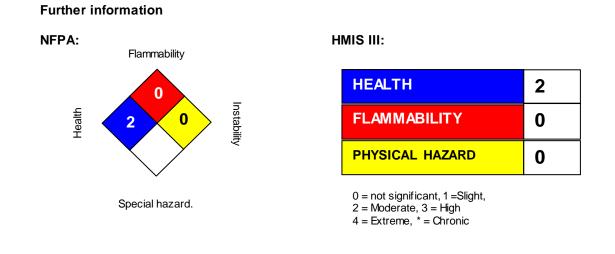
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|-------------|--------------------------|-----------------------|
| | | |

| NZIOC | Not in compliance with the inventory |
|-------|---|
| PICCS | Not in compliance with the inventory |
| IECSC | On the inventory, or in compliance with the inventory |

Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION



OSHA GHS Label Information:

| Hazard pictograms | |
|---|---|
| Signal w ord Hazard statements Precautionary statements | Warning: Causes serious eye irritation. 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. |

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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.