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

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| Material name | : | O2 VERVE BY TIMEMIST REFILL 6/CS |
|-------------------------------|-----|---|
| Material number | : | 00000000001047425 |
| Manufacturer or supplier's de | eta | 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 Emergency | : | CHEMTREC: 800-424-9300 - All Calls Recorded. In the District of Columbia 202-483-7616 | |

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

| Appearance | liquid |
|------------|----------------|
| Colour | clear, red |
| Odour | characteristic |

GHS Classification

| Flammable liquids Skin corrosion/irritation Skin sensitisation | : Category 3 : Category 2 : Category 1 |
|--|--|
| GHS Label element | |
| Hazard pictograms | |
| Signal word | : Warning |
| Hazard statements | H226 Flammable liquid and vapour. H315 Causes skin irritation. H317 May cause an allergic skin reaction. |
| Precautionary statements | Prevention: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment. |



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| | P242 Use only non-sparking tools P243 Take precautionary measure P261 Avoid breathing dust/ fume. P264 Wash skin thoroughly after P271 Use only outdoors or in a ween version of the workplace. P280 Wear protective gloves/ eyeen expression of the workplace. P303 + P361 + P353 IF ON SKIN immediately all contaminated cloth shower. P304 + P340 + P312 IF INHALEI and keep at rest in a position con POISON CENTER or doctor/ phy P305 + P351 + P338 IF IN EYES for several minutes. Remove con easy to do. Continue rinsing. P333 + P313 If skin irritation or raadvice/ attention. P337 + P313 If eye irritation person attention. P362 Take off contaminated cloth P370 + P378 In case of fire: Use alcohol-resistant foam for extinction Storage: P403 + P235 Store in a well-vent P405 Store locked up. Disposal: P501 Dispose of contents/contair regulation. | res against static discharge. / gas/ mist/ vapours/ spray. handling. /ell-ventilated area. g should not be allowed out o e protection/ face protection. I (or hair): Remove/ Take off thing. Rinse skin with water/ D: Remove victim to fresh air nfortable for breathing. Call a /sician if you feel unwell. S: Rinse cautiously with water tact lenses, if present and ash occurs: Get medical ists: Get medical advice/ hing and wash before reuse. dry sand, dry chemical or ion. |
| Potential Health Effects | | |
| Carcinogenicity: IARC | No component of this product preser equal to 0.1% is identified as probab | |
| ACGIH | human carcinogen by IARC. No component of this product preser equal to 0.1% is identified as a carcir | |
| OSHA | carcinogen by ACGIH. No component of this product preser equal to 0.1% is identified as a carcir | |
| NTP | carcinogen by OSHA. No component of this product preser equal to 0.1% is identified as a know by NTP. | |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components



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|--------------------------------------|-------------------------|----------------------|--|
| Chemical Name | CAS-No. | Concentration [%] | |
| decanal | 112-31-2 | >= 25 - < 50 | |
| citral | 5392-40-5 | >= 10 - < 15 | |
| octanal | 124-13-0 | >= 10 - < 15 | |
| (R)-p-mentha-1,8-diene | 5989-27-5 | >= 5 - < 10 | |
| citronellal | 106-23-0 | >= 3 - < 5 | |
| hexyl acetate | 142-92-7 | >= 3 - < 5 | |
| allyl (3-methylbutoxy)acetate | 67634-00-8 | >= 1 - < 3 | |
| dodecanal | 112-54-9 | >= 1 - < 3 | |
| 2,4-dimethylcyclohex-3-ene-1-carbale | dehyde 68039-49-6 | >= 1 - <= 3 | |

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 | Move to fresh air in case of accidental inhalation of vap | ours. |
| In case of skin contact | If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water wh removing all contaminated clothes and shoes. Wash contaminated clothing before re-use. | ile |
| In case of eye contact | Rinse immediately with plenty of water, also under the of for at least 15 minutes. If eye irritation persists, consult a specialist. | eyelids, |
| If swallowed | Clean mouth with water and drink afterwards plenty of v | water. |

SECTION 5. FIREFIGHTING MEASURES

| Suitable extinguishing media | : | Water spray Carbon dioxide (CO2) Foam |
|---|---|--|
| Unsuitable extinguishing media | : | High volume water jet |
| Hazardous combustion products Specific extinguishing methods | : | None |
| 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. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers. |
| Special protective equipment for firefighters | : | In the event of fire, wear self-contained breathing apparatus. |





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SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency procedures | Remove all sources of ignition. Use personal protective equipment. Avoid skin contact with leaking liquid (danger of frostbite). |
|---|---|
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. |
| Methods and materials for containment and cleaning up | Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Non-sparking tools should be used. Sweep up and shovel into suitable containers for disposal. |

SECTION 7. HANDLING AND STORAGE

| Advice on safe handling | : | Keep away from fire, sparks and heated surfaces. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Avoid contact with skin and eyes. |
|-----------------------------|---|---|
| Conditions for safe storage | : | No smoking. 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 | : | Store and keep away from, oxidizing agents and acids. Store and keep away from bases and alkalies. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|------------|-----------|---|---|-------|
| citral | 5392-40-5 | TWA (Inhalable fraction and vapor) | 5 ppm | ACGIH |

Personal protective equipment

Respiratory protection

: Use NIOSH approved respiratory protection. In the case of vapour formation use a respirator with an



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| | approved filter. | |
| Hand protection Material | : Protective gloves | |
| Eye protection | : Safety glasses with side-shields Ensure that eyewash stations and the workstation location. | safety showers are close to |
| Skin and body protection | : impervious clothing Choose body protection according concentration of the dangerous sub | |
| Hygiene measures | : When using do not eat, drink or sm | oke. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | liquid |
|--|---|-------------------|
| Colour | : | clear, red |
| Odour | : | characteristic |
| Odour Threshold | : | no data available |
| рН | : | no data available |
| Melting point/freezing point | : | no data available |
| Boiling point | : | no data available |
| Flash point | : | 54 °C |
| Evaporation rate | | no data available |
| Upper explosion limit | | no data available |
| Lower explosion limit | | no data available |
| Vapour pressure | | 1.97 hPa (20 °C) |
| | • | 1.37 11 2 (20 0) |
| Relative density | : | 0.8720 - 0.8760 |
| Density | : | no data available |
| Solubility(ies) | | |
| Water solubility | : | insoluble |
| Partition coefficient: n- octanol/water | : | no data available |
| Auto-ignition temperature | : | not determined |
| Thermal decomposition | : | no data available |
| Viscosity | | |
| Viscosity, kinematic | : | no data available |



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SECTION 10. STABILITY AND REACTIVITY

| Reactivity | : Stable |
|-------------------------------------|---|
| Chemical stability | : Stable under normal conditions. |
| Possibility of hazardous reactions | : Vapours may form explosive mixture with air. |
| Conditions to avoid | : Heat, flames and sparks. |
| Incompatible materials | : Strong oxidizing agents Strong acids Strong bases |
| Hazardous decomposition products | : No decomposition if stored normally. |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

| Product: | | |
|---|---|---|
| Acute oral toxicity | : | Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method |
| Acute dermal toxicity | : | Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method |
| Components: | | |
| decanal: Acute oral toxicity | : | LD50 Oral mouse: > 41,750 mg/kg |
| Acute dermal toxicity | : | LD50 Dermal rabbit: 4,193 mg/kg |
| (R)-p-mentha-1,8-diene: Acute oral toxicity | : | LD50 Oral rat: 4,400 mg/kg |
| Acute dermal toxicity | : | LD50 Dermal rabbit: > 5,000 mg/kg |
| hexyl acetate: Acute oral toxicity | : | LD50 Oral rat: 36,230 mg/kg |
| Acute dermal toxicity | : | LD50 Dermal rabbit: > 5,000 mg/kg |
| Skin corrosion/irritation | | |
| Product: | | |

Remarks: Irritating to skin.



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Serious eye damage/eye irritation

Product:

Remarks: May irritate eyes.

Respiratory or skin sensitisation

Product:

Remarks: May cause sensitisation of susceptible persons by skin contact.

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

decanal: citral: octanal: (R)-p-mentha-1,8-diene: citronellal: hexyl acetate: allyl (3-methylbutoxy)acetate: dodecanal: 2,4-dimethylcyclohex-3-ene-1-carbaldehyde:

STOT - single exposure

no data available

STOT - repeated exposure

no data available

Aspiration toxicity

no data available

Further information

Product:

Remarks: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Persistence and degradability



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| no data available Bioaccumulative potential | | |
| Product: | | |
| Partition coefficient: n- octanol/water <u>Components:</u> citral : | : Remarks: no data available | |
| Partition coefficient: n- octanol/water hexyl acetate : | : Pow: 2.76 | |
| Partition coefficient: n- octanol/water | : log Pow: 2.8 | |
| Mobility in soil | | |
| no data available | | |
| Other adverse effects | | |
| no data available Product: | | |
| Regulation | 40 CFR Protection of Environment; Stratospheric Ozone - CAA Sectior Substances | |
| Remarks | This product neither contains, nor w with a Class I or Class II ODS as d Clean Air Act Section 602 (40 CFR + B). | efined by the U.S. |
| Additional ecological information | : An environmental hazard cannot be event of unprofessional handling of aquatic life., Harmful to aquatic life effects. | disposal., Toxic to |

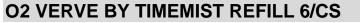
SECTION 13. DISPOSAL CONSIDERATIONS

| Disposal methods | |
|------------------------|---|
| Waste from residues | : Dispose of in accordance with local regulations. |
| Contaminated packaging | : Dispose of contents/ container to an approved waste disposal plant. |

SECTION 14. TRANSPORT INFORMATION

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

Transportation Regulation: IMDG (Vessel): UN1169, EXTRACTS, AROMATIC, LIQUID, 3, III



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Zepinc

Transportation Regulation: IATA (Cargo Air): UN1169, Extracts, aromatic, liquid, 3, III

Transportation Regulation: IATA (Passenger Air): UN1169, Extracts, aromatic, liquid, 3, III

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

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 Hazard | Is : Fire Hazard Acute Health Hazard |
|--|--|
| SARA 302 | : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. |
| SARA 313 | : 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 th | nis product are reported in the following inventories: |
| TSCA DSL AICS NZIOC PICCS IECSC | On TSCA Inventory All components of this product are on the Canadian DSL. On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory |
| Inventory Acronym ar | nd Validity Area Legend: |

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), TSCA (USA)

SECTION 16. OTHER INFORMATION

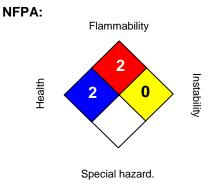


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Further information



HMIS III:

| HEALTH | 2 |
|-----------------|---|
| FLAMMABILITY | 2 |
| PHYSICAL HAZARD | 0 |

^{0 =} not significant, 1 =Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic

OSHA GHS Label Information:

| Hazard pictograms | |
|--------------------------|--|
| Signal word | : Warning: |
| Hazard statements | Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. |
| Precautionary statements | |
| | Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ eye protection/ face protection. Response: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. If eye irritation. Storage: Store in a well-ventilated place. Keep cool. Store locked up. Disposal: Dispose of contents/container in accordance with local regulation. |

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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.