SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : R10924 ALCOHOL HAND SANITIZING GE 4/1 GL
Material number : 000000000566610924

Manufacturer or supplier's details
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>viscous, gel</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless, clear</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

GHS Classification

- Flammable liquids : Category 2
- Eye irritation : Category 2A

GHS Label element

Hazard pictograms : 🍃⚠️

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.

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.
P242 Use only non-sparking tools.
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>ethanol</td>
<td>64-17-5</td>
<td>&gt;= 50 - &lt; 70</td>
</tr>
</tbody>
</table>

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 : This product is formulated for use on skin but should always

be immediately washed off with plenty of water. Discontinue use if irritation and redness develop. If conditions persist for more than 72 hours, consult a physician.

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

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.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical Water spray jet

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: 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: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Material can create slippery conditions. Use non-slip safety shoes in areas where spills or leaks can occur. Refer to protective measures listed in sections 7 and 8. 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 formation of aerosol. Do not breathe vapours/dust. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Avoid contact with 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.

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>ethanol</td>
<td>64-17-5</td>
<td>TWA</td>
<td>1,000 ppm</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>
</tbody>
</table>

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
Remarks: No special protection is required.

Eye protection: Eye protection is not required while washing with this product. In the workplace, the use of safety glasses is recommended to avoid eye exposure during the handling of containers or during spill clean-up.

Skin and body protection: No special protection is required.

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**: viscous, gel

**Colour**: colourless, clear

**Odour**: characteristic

**Odour Threshold**: no data available

**pH**: 7 - 8

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

**Boiling point**: no data available

**Flash point**: 23.33 °C
   Method: closed cup

**Evaporation rate**: > 1
   n-Butyl Acetate = 1.0

**Upper explosion limit**: 12 %(V)

**Lower explosion limit**: 2 %(V)

**Vapour pressure**: no data available

**Relative vapour density**: no data available

**Density**: 0.896 g/cm³

**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 : 4,955.4 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.
Vapours may form explosive mixture with air.
Conditions to avoid : Heat, flames and sparks.
Incompatible materials : Strong oxidizing agents
Hazardous decomposition products : Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION
Acute toxicity
Product:
Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

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

Skin corrosion/irritation
Product:
Result: No skin irritation

Serious eye damage/eye irritation
Product:
Remarks: Irritating to eyes.

Respiratory or skin sensitisation
no data available
SAFETY DATA SHEET

R10924 ALCOHOL HAND SANITIZING GE 4/1 GL

Version 1.0
Revision Date 04/10/2015
Print Date 08/12/2015

Germ cell mutagenicity
no data available

Carcinogenicity
no data available

Reproductive toxicity
no data available

ethanol:
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
no data available

Bioaccumulative potential

Product:
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
SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
- Waste from residues: Dispose of in accordance with local regulations.
  - Do not dispose of waste into sewer.
  - Do not contaminate ponds, waterways or ditches with chemical or used container.
- 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): This material is not classified.
- Transportation Regulation: IMDG (Vessel): This material is not classified.
- Transportation Regulation: IATA (Cargo Air): This material is not classified.
- Transportation Regulation: IATA (Passenger Air): This material is not classified.
- Transportation Regulation: TDG (Canada): This material is not classified.

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 Hazards: Fire Hazard
SAFETY DATA SHEET

R10924 ALCOHOL HAND SANITIZING GE 4/1 GL

Version 1.0  Revision Date 04/10/2015  Print Date 08/12/2015

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**
  - On TSCA Inventory

- **DSL**
  - This product contains one or several components that are not on the Canadian DSL nor NDSL.

- **AICS**
  - Not in compliance with the inventory

- **NZIoC**
  - Not in compliance with the inventory

- **PICCS**
  - Not in compliance with the inventory

- **IECSC**
  - Not 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), TSCA (USA)

---

**SECTION 16. OTHER INFORMATION**

**Further information**

**NFPA:**

- Flammability: 3
- Health: 1
- Instability: 0

Special hazard.

**HMIS III:**

- **HEALTH:** 1
- **FLAMMABILITY:** 3
- **PHYSICAL HAZARD:** 0

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

**OSHA GHS Label Information:**
SAFETY DATA SHEET

R10924 ALCOHOL HAND SANITIZING GE 4/1 GL

Version 1.0
Revision Date 04/10/2015
Print Date 08/12/2015

Hazard pictograms:

Signal word: Danger

Hazard statements: Highly flammable liquid and vapour. Causes serious eye irritation.

Precautionary statements:
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. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Storage: Store in a well-ventilated place. Keep cool.
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.