SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name: ZEP HVY-DTY TKO HAND CLEANER 4 1 GAL
Material number: R54824

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: Hand Care

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

<table>
<thead>
<tr>
<th>Appearance</th>
<th>viscous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>light blue</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

GHS Classification
Eye irritation: Category 2A

GHS label elements
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/
SAFETY DATA SHEET
ZEP HVY-DTY TKO HAND CLEANER 4 1 GAL
Version 2.0  Revision Date 02/07/2018  Print Date 10/29/2019

attention.

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>Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts</td>
<td>68439-57-6</td>
<td>&gt;= 5 - &lt; 10</td>
</tr>
<tr>
<td>1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-</td>
<td>68139-30-0</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>N-coco acyl derivs., hydroxides, inner salts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohols, C9-11, ethoxylated</td>
<td>68439-46-3</td>
<td>&gt;= 1 - &lt; 3</td>
</tr>
<tr>
<td>Fuller's earth</td>
<td>8031-18-3</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>stearic acid</td>
<td>57-11-4</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>quartz (SiO2)</td>
<td>14808-60-7</td>
<td>&gt;= 0.1 - &lt; 1</td>
</tr>
</tbody>
</table>

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

SECTION 4. FIRST AID MEASURES

General advice : 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. 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.

Most important symptoms and effects, both acute and delayed : Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash. Causes serious eye irritation. Review section 2 of SDS to see all potential hazards.

Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES
SAFETY DATA SHEET
ZEP HVY-DTY TKO HAND CLEANER 4 1 GAL

Version 2.0  Revision Date 02/07/2018  Print Date 10/29/2019

Suitable extinguishing media: Dry chemical
Foam
Alcohol-resistant foam
Carbon dioxide (CO2)

Unsuitable extinguishing media: High volume water jet

Hazardous combustion products: Carbon dioxide (CO2)
Carbon monoxide
Smoke
Nitrogen oxides (NOx)

Specific extinguishing methods: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information: Standard procedure for chemical fires.

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.

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: 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.
Avoid contact with eyes.

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.

Materials to avoid: No materials to be especially mentioned.
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>stearic acid</td>
<td>57-11-4</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (total dust)</td>
<td>30 mg/m³ / %SiO₂+2</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (respirable)</td>
<td>10 mg/m³ / %SiO₂+2</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable dust)</td>
<td>0.05 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable dust)</td>
<td>0.05 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PEL (Respirable dust)</td>
<td>0.05 mg/m³</td>
<td>CAL PEL</td>
</tr>
</tbody>
</table>

**Engineering measures**: effective ventilation in all processing areas

**Personal protective equipment**

- **Respiratory protection**: No personal respiratory protective equipment normally required.

- **Hand protection**
  - **Remarks**: No special protection is required.

- **Eye protection**
  - **Remarks**: 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**
  - **Remarks**: No special protection is required.

- **Hygiene measures**
  - **Remarks**: When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**: viscous
- **Colour**: light blue
- **Odour**: characteristic
Odour Threshold : No data available
pH : 5.5 - 6.5
Melting point/freezing point : No data available
Boiling point : 100 °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 : 1.102 g/cm³

Solubility(ies)
Water solubility : soluble
Solubility in other solvents : not determined

Partition coefficient: n-octanol/water : No data available
Auto-ignition temperature : not determined
Thermal decomposition : No data available

SECTION 10. STABILITY AND REACTIVITY
Reactivity : Stable
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid : No data available
Incompatible materials : None.
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 irritation, redness, pain, and rash.

Carcinogenicity:
IARC: Group 1: Carcinogenic to humans

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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

Skin corrosion/irritation
Product: Result: No skin irritation

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

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
Product:
Carcinogenicity - Assessment: Not classified due to product form (liquid) and classification route of entry (inhaled powder), Not classifiable as a human carcinogen.

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
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 + B).
SAFETY DATA SHEET

ZEP HVY-DTY TKO HAND CLEANER 4 1 GAL

Version 2.0    Revision Date 02/07/2018    Print Date 10/29/2019

Additional ecological information: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: Dispose of in accordance with local regulations. The product should not be allowed to enter drains, water courses or the soil. 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.

SECTION 14. TRANSPORT INFORMATION

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

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>methanol</td>
<td>67-56-1</td>
<td>5000</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 : 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

This product contains a chemical that is at or below California Propositions 65's "safe harbor level" as determined via a risk assessment. Therefore, the chemical is not required to be listed as a Prop 65 chemical on the SDS or label.

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

DSL : This product contains one or more components that are listed on the Canadian NDSL. All other components 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
Further information

NFPA:

Flammability

Health

2

0

Special hazard.

HMIS III:

PHYSICAL HAZARD 0

FLAMMABILITY 0

HEALTH 2

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

OSHA - GHS Label Information:

Hazard pictograms

Signal word: Warning:

Causes serious eye irritation.

Hazard statements

Precautionary statements:

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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