

ZEP 45 DUAL FORCE LIQUID 4-1GL

Version 2.0

Revision Date 05/10/2018

Print Date 04/02/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP 45 DUAL FORCE LIQUID 4-1GL

Material number : 000000000000374524

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** : 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 : Lubricant

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

| | |
|------------|----------------|
| Appearance | liquid |
| Colour | amber |
| Odour | characteristic |

GHS Classification

Aspiration hazard : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H304 May be fatal if swallowed and enters airways.

Precautionary statements : **Response:**
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.

Disposal:
P501 Dispose of contents/container in accordance with local regulation.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

| Chemical name | CAS-No. | Concentration [%] |
|--|------------|-------------------|
| Distillates (petroleum), hydrotreated light | 64742-47-8 | >= 50 - < 70 |
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | >= 10 - < 20 |
| Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate | 88917-22-0 | >= 5 - < 10 |
| Solvent naphtha (petroleum), heavy aliph. | 64742-96-7 | >= 1 - < 3 |

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

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
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.
Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.
Wash off with plenty of water.
- In case of eye contact : Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
Immediately flush eye(s) with plenty of water.
If eye irritation persists, consult a specialist.
- 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.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Effects are dependent on exposure (dose, concentration, contact time).
Effects are immediate and delayed.
Symptoms may include irritation, redness, pain, and rash.
Aspiration may cause pulmonary oedema and pneumonitis.
May be fatal if swallowed and enters airways.
Review section 2 of SDS to see all potential hazards.

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

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry chemical
Water
Carbon dioxide (CO₂)
Foam
- 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
Sulphur oxides
- 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.
- 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 : Use personal protective equipment.
Ensure adequate ventilation.
- 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 : 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

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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.
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 : Oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|------------|----------------------------------|---|-----------|
| Distillates (petroleum), hydrotreated light | 64742-47-8 | TWA | 500 ppm 2,000 mg/m ³ | OSHA Z-1 |
| | | TWA | 400 ppm 1,600 mg/m ³ | OSHA P0 |
| | | TWA (Mist) | 5 mg/m ³ | OSHA Z-1 |
| | | TWA (Mist) | 5 mg/m ³ | OSHA P0 |
| | | TWA (Mist) | 5 mg/m ³ | NIOSH REL |
| | | ST (Mist) | 10 mg/m ³ | NIOSH REL |
| | | PEL (particulate) | 5 mg/m ³ | CAL PEL |
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | TWA (Mist) | 5 mg/m ³ | OSHA Z-1 |
| | | TWA (Inhalable fraction) | 5 mg/m ³ | ACGIH |

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Material

Remarks

: Protective gloves
: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Safety glasses
Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.

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| | |
|--------------------------|---|
| Skin and body protection | : Impervious clothing 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 | : liquid |
| Colour | : amber |
| Odour | : characteristic |
| Odour Threshold | : No data available |
| pH | : Not applicable |
| Melting point/freezing point | : No data available |
| Boiling point | : > 204.44 °C |
| Flash point | : > 93.3 °C Method: closed cup |
| Evaporation rate | : < 1 n-Butyl Acetate = 1.0 |
| Upper explosion limit | : No data available |
| Lower explosion limit | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density | : No data available |
| Density | : 0.87 g/cm ³ |
| Bulk density | : No data available |
| Solubility(ies) | |
| Water solubility | : insoluble |
| Solubility in other solvents | : insoluble |
| Partition coefficient: n-octanol/water | : No data available |
| Auto-ignition temperature | : No data available |
| Thermal decomposition | : No data available |
| Viscosity | |
| Viscosity, dynamic | : No data available |
| 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. No decomposition if stored and applied as directed. |
| Conditions to avoid | : No data available |
| Incompatible materials | : Oxidizing agents |
| Hazardous decomposition products | : Carbon oxides |

SECTION 11. TOXICOLOGICAL INFORMATION**Potential Health Effects**

| | |
|------------------------------|---|
| Aggravated Medical Condition | : None known. |
| Symptoms of Overexposure | : Effects are dependent on exposure (dose, concentration, contact time). Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash. Aspiration may cause pulmonary oedema and pneumonitis. |

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 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:**

| | |
|-----------------------|---|
| Acute dermal toxicity | : Acute toxicity estimate : 3,689 mg/kg Method: Calculation method |
|-----------------------|---|

Components:**Distillates (petroleum), hydrotreated light:**

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Acute oral toxicity : LD50 Rat: > 5,000 mg/kg

Acute inhalation toxicity : LC50 Rat: > 4.6 mg/l
Exposure time: 6 h

Acute dermal toxicity : LD50 Rat: > 2,000 mg/kg

Distillates (petroleum), hydrotreated heavy naphthenic:

Acute oral toxicity : LD50 Rat: > 5,000 mg/kg

Acute inhalation toxicity : LC50 Rat: > 5 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 Rabbit: > 5,000 mg/kg

Skin corrosion/irritation**Product:**

Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation**Product:**

Remarks: Contact with eyes may cause irritation.

Respiratory or skin sensitisation

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**Product:**

Remarks: Solvents may degrease the skin.

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Components:**Distillates (petroleum), hydrotreated light:**

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).

Additional ecological : An environmental hazard cannot be excluded in the
information event of unprofessional handling or disposal., Toxic to
aquatic life with long lasting effects.

Components:**Distillates (petroleum), hydrotreated light :**

Additional ecological : No data available
information

SECTION 13. DISPOSAL CONSIDERATIONS
Disposal methods

Waste from residues : The product should not be allowed to enter drains, water
courses or the soil.

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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

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

Transportation Regulation: IMDG (Vessel):
UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (HYDROTREATED LIGHT PETROLEUM DISTILLATES, Dipropylene glycol methyl ether acetate), 9, III

Transportation Regulation: IATA (Cargo Air):
UN3082, Environmentally hazardous substance, liquid, n.o.s., (HYDROTREATED LIGHT PETROLEUM DISTILLATES, Dipropylene glycol methyl ether acetate), 9, III

Transportation Regulation: IATA (Passenger Air):
UN3082, Environmentally hazardous substance, liquid, n.o.s., (HYDROTREATED LIGHT PETROLEUM DISTILLATES, Dipropylene glycol methyl ether acetate), 9, III

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

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|----------------|----------|--------------------|-----------------------------|
| pentyl acetate | 628-63-7 | 5000 | * |

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*: 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 : Aspiration 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:

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

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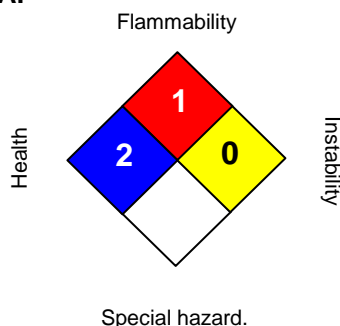
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Further information

NFPA:



HMIS III:

| | |
|-----------------|---|
| HEALTH | 3 |
| FLAMMABILITY | 1 |
| PHYSICAL HAZARD | 0 |

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

OSHA - GHS Label Information:

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: May be fatal if swallowed and enters airways.

Precautionary statements

:

Response: IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.

Disposal: Dispose of contents/container in accordance with local regulation.

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