

ZEP BIG ORANGE LIQUID 4-3.78L

Version 3.1

Revision Date 08/16/2017

Print Date 09/28/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP BIG ORANGE LIQUID 4-3.78L

Material number : 41524C

Manufacturer or supplier's details

Company : Zep Inc.

Address : 11627 - 178 Street
Edmonton, Alberta T5S 1N6
Canada

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.

Recommended use of the chemical and restrictions on use

Recommended use : Degreaser

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	clear, orange
Odour	strong

GHS Classification

Flammable liquids : Category 3

Skin irritation : Category 2

Serious eye damage : Category 1

Skin sensitisation : Category 1

Aspiration hazard : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.

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H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

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 and bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
d-limonene	5989-27-5	>= 70 - < 90
p-mentha-1,4-diene	99-85-4	>= 1 - < 5
linalool	78-70-6	>= 1 - < 5
Alcohols, C9-11, ethoxylated	68439-46-3	>= 1 - < 5
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	>= 1 - < 5
7-methyl-3-methyleneocta-1,6-diene	123-35-3	>= 1 - < 5

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SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Consult a physician.
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 : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Wash contaminated clothing before re-use.
If skin irritation persists, call a physician.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Effects are immediate and delayed.
Symptoms may include blistering, irritation, burns, and pain.
Effects are dependent on exposure (dose, concentration, contact time).
Causes serious eye damage.
May cause an allergic skin reaction.
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.
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SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during : Do not allow run-off from fire fighting to enter drains or water
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firefighting	courses.
Hazardous combustion products	: Carbon dioxide (CO ₂) Carbon monoxide Smoke
Specific extinguishing methods	: Standard procedure for chemical fires.
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	: Use personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas. 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 condensate with inert absorbent material and collect in ventilated waste container for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: Do not breathe vapours or spray mist. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. 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. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not
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be employed in any process in which this mixture is being used.

- 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 : Oxidizing agents
Do not store near acids.
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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

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

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
Material : Protective gloves
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.
- 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.
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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : clear, orange
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Odour : strong
Odour Threshold : No data available
pH : Not applicable
Melting point/freezing point : No data available
Boiling point : 170 °C
Flash point : 49.4 °C
Method: closed cup

Evaporation rate : < 1

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : 2.533 hPa

Relative vapour density : No data available

Density : 0.864 g/cm³

Solubility(ies)

Water solubility : emulsifiable

Solubility in other solvents : Not applicable

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : not determined

Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : 3.8 mm²/s (20 °C)

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 : Heat, flames and sparks.

Incompatible materials : Oxidizing agents
Strong acids

Hazardous decomposition products : No decomposition if stored and applied as directed.

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

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Effects are immediate and delayed.
Symptoms may include blistering, irritation, burns, and pain.
Effects are dependent on exposure (dose, concentration, contact time).

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.

Acute toxicity**Product:**

Acute oral toxicity : Acute toxicity estimate : 4,967 mg/kg
Method: Calculation method

Components:**d-limonene:**

Acute oral toxicity : LD50 Oral Rat: 4,400 mg/kg

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

Alcohols, C9-11, ethoxylated:

Acute oral toxicity : LD50 Oral Rat: 1,400 mg/kg

7-methyl-3-methyleneocta-1,6-diene:

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

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

Skin corrosion/irritation**Product:**

Remarks: Irritating to skin.

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

Remarks: May cause irreversible eye damage.

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Respiratory or skin sensitisation

Product:

Remarks: Causes sensitisation.

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.

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:

Additional ecological information : No data available

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SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : 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.
Dispose of in accordance with local regulations.
- 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 (TDG) / Règlement Pour Le Transport (TMD): (Canada):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel):
UN1993, FLAMMABLE LIQUID, N.O.S., (D-LIMONENE), 3, III

Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air):
UN1993, Flammable liquid, n.o.s., (D-LIMONENE), 3, III

Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air):
UN1993, Flammable liquid, n.o.s., (D-LIMONENE), 3, III

Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

The product as delivered to the customer conforms to packaging requirements for shipment by road under Transport Dangerous Goods (TDG) Canada 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

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

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

TSCA On TSCA Inventory
DSL This product contains one or more components that are listed on the Canadian NDSL. All other components are on the Canadian DSL.

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

WHMIS - GHS Label Information:

Hazard pictograms :



Signal word :

Danger:

Hazard statements :

Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage.

Precautionary statements :

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/eye protection/face protection.

Response: IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage: Store in a well-ventilated place. Keep cool.

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

SAFETY DATA SHEET



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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.