

## ZEP BIG ORANGE (AEROSOL) 1 DZ

Version 1.1

Revision Date 11/10/2015

Print Date 04/28/2016

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP BIG ORANGE (AEROSOL) 1 DZ

Material number : 00000000000011401

#### Manufacturer or supplier's details

Company : Zep Inc.

Address : 1310 Seaboard Industrial Blvd., NW  
Atlanta, GA 30318

Telephone : 404-352-1680

#### Emergency telephone numbers

|                                       |  |
|---------------------------------------|--|
| <b>For SDS Information</b>            | : Compliance Services 1-877-428-9937   |
| <b>For a Medical Emergency</b>        | : 877-541-2016 Toll Free - All Calls Recorded  |
| <b>For a Transportation Emergency</b> | : CHEMTREC: 800-424-9300 - All Calls Recorded.<br>In the District of Columbia 202-483-7616 |

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

|            |                                    |
|------------|------------------------------------|
| Appearance | Aerosol containing a liquefied gas |
| Colour     | clear, colourless                  |
| Odour      | characteristic                     |

#### GHS Classification

Flammable aerosols : Category 1  
 Gases under pressure : Liquefied gas  
 Skin irritation : Category 2  
 Eye irritation : Category 2A  
 Skin sensitisation : Category 1

#### GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.  
 H280 Contains gas under pressure; may explode if heated.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**  
 P210 Keep away from heat/sparks/open flames/hot surfaces.  
 No smoking.  
 P211 Do not spray on an open flame or other ignition source.

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P251 Pressurized container: Do not pierce or burn, even after use.  
 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 eye protection/ face protection.  
 P280 Wear protective gloves.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
 P337 + P313 If eye irritation persists: Get medical advice/ attention.  
 P362 Take off contaminated clothing and wash before reuse.

**Storage:**

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

**Disposal:**

Dispose of contents/container in accordance with local regulation.

**Potential Health Effects****Carcinogenicity:**

|              |   |
|--------------|---|
| <b>IARC</b>  | 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. |
| <b>ACGIH</b> | 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.            |
| <b>OSHA</b>  | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.             |
| <b>NTP</b>   | 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.                 |

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

| Chemical Name                 | CAS-No.    | Concentration [%] |
|-------------------------------|------------|-------------------|
| Citrus, ext.                  | 94266-47-4 | >= 70 - < 90      |
| propane                       | 74-98-6    | >= 5 - < 10       |
| butane                        | 106-97-8   | >= 5 - < 10       |
| Alcohols, C9-11, ethoxylated  | 68439-46-3 | >= 1 - < 5        |
| Alcohols, C12-16, ethoxylated | 68551-12-2 | >= 1 - < 5        |

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

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**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.  
Consult a physician after significant exposure.
- In case of skin contact : If on clothes, remove clothes.  
Wash off immediately with plenty of water for at least 15 minutes.  
If symptoms persist, call 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.  
Rinse immediately with plenty of water for at least 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.  
Take victim immediately to hospital.
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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
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 (CO<sub>2</sub>)  
Carbon monoxide  
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : For safety reasons in case of fire, cans should be stored separately in closed containments.  
Use a water spray to cool fully closed containers.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Special protective equipment : Wear self-contained breathing apparatus for firefighting if
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for firefighters

necessary.

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
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 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.

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### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : 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.  
Do not breathe vapours or spray mist.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Dispose of rinse water in accordance with local and national regulations.  
Always replace cap after use.
- Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.  
No smoking.  
Keep in a cool, well-ventilated place.  
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.

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### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

| Components | CAS-No. | Value type | Control | Basis |
|------------|---------|------------|---------|-------|
|------------|---------|------------|---------|-------|

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|         |          | (Form of exposure) | parameters / Permissible concentration |           |
|---------|----------|--------------------|--|-----------|
| propane | 74-98-6  | TWA                | 1,000 ppm                              | ACGIH     |
|         |          | TWA                | 1,000 ppm<br>1,800 mg/m3               | NIOSH REL |
|         |          | TWA                | 1,000 ppm<br>1,800 mg/m3               | OSHA Z-1  |
|         |          | TWA                | 1,000 ppm<br>1,800 mg/m3               | OSHA P0   |
| butane  | 106-97-8 | TWA                | 800 ppm<br>1,900 mg/m3                 | NIOSH REL |
|         |          | TWA                | 800 ppm<br>1,900 mg/m3                 | OSHA P0   |

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

Eye protection : Ensure that eyewash stations and safety showers are close to the workstation location.  
Tightly fitting safety goggles

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 : Aerosol containing a liquefied gas

Colour : clear, colourless

Odour : characteristic

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point : not determined

Flash point :  
No data available

Evaporation rate : No data available

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|                              |                                |
|------------------------------|--------------------------------|
| Flammability (solid, gas)    | : Extremely flammable aerosol. |
| Upper explosion limit        | : No data available            |
| Lower explosion limit        | : No data available            |
| Vapour pressure              | : not determined               |
| Relative vapour density      | : No data available            |
| Density                      | : 0.859 g/cm <sup>3</sup>      |
| Solubility(ies)              |                                |
| Water solubility             | : emulsifiable                 |
| Solubility in other solvents | : not determined               |
| Auto-ignition temperature    | : not determined               |
| Thermal decomposition        | : No data available            |
| Viscosity                    |                                |
| Viscosity, kinematic         | : No data available            |
| Heat of combustion           | : > 30 kJ/g                    |

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**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.<br>Vapours may form explosive mixture with air. |
| Conditions to avoid                | : Heat, flames and sparks.<br>Extremes of temperature and direct sunlight.                            |
| Incompatible materials             | : Acids<br>Oxidizing agents   |
| Hazardous decomposition products   | : Carbon oxides   |

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**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

|                     |   |
|---------------------|---|
| Acute oral toxicity | : Acute toxicity estimate : > 5,000 mg/kg<br>Method: Calculation method |
|---------------------|---|

**Components:**

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**propane:**Acute inhalation toxicity : LC50 Mouse: 1,237 mg/l  
Exposure time: 2 hLC50 Rat: 658 mg/l  
Exposure time: 4 h

LC50 Rat: 1,355 mg/l

**butane:**Acute inhalation toxicity : LC50 Mouse: 1,237 mg/l  
Exposure time: 2 h

LC50 Rat: 1,355 mg/l

**Alcohols, C9-11, ethoxylated:**

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

**Skin corrosion/irritation****Product:**

Remarks: May cause skin irritation and/or dermatitis.

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

Remarks: Irritating to eyes.

**Respiratory or skin sensitisation****Product:**

Remarks: Causes sensitisation.

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Citrus, ext.:****propane:****butane:****Alcohols, C9-11, ethoxylated:****Alcohols, C12-16, ethoxylated:****STOT - single exposure**

No data available

**STOT - repeated exposure**

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No data available

**Aspiration toxicity**

No data available

**Further information****Product:**Remarks: No data available

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential****Components:****butane :**Partition coefficient: n- : Pow: 2.89  
octanol/water**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 information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life.

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**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.

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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):  
ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):  
UN1950, AEROSOLS, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air):  
UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air):  
UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada):  
UN1950, AEROSOLS, 2.1, - Limited quantity

**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** : Sudden Release of Pressure Hazard  
Fire Hazard  
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.

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

|              |  |
|--------------|--|
| <b>TSCA</b>  | On TSCA Inventory                                      |
| <b>DSL</b>   | All components of this product are on the Canadian DSL |
| <b>AICS</b>  | On the inventory, or in compliance with the inventory  |
| <b>NZIoC</b> | Not in compliance with the inventory                   |
| <b>PICCS</b> | On the inventory, or in compliance with the inventory  |
| <b>IECSC</b> | On the inventory, or in compliance with the inventory  |

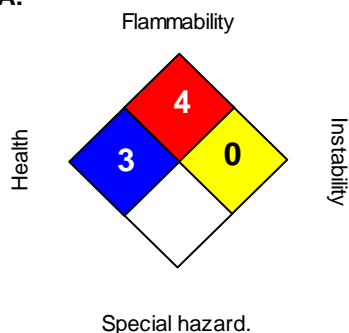
#### Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

## SECTION 16. OTHER INFORMATION

### Further information

#### NFPA:



#### HMIS III:

|                        |          |
|------------------------|----------|
| <b>HEALTH</b>          | <b>3</b> |
| <b>FLAMMABILITY</b>    | <b>4</b> |
| <b>PHYSICAL HAZARD</b> | <b>2</b> |

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

### OSHA GHS Label Information:

Hazard pictograms :



Signal word :

**Danger:**

Hazard statements :

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

Precautionary statements :

**Prevention:** Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. 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 eye protection/ face protection. Wear protective gloves.  
**Response:** IF ON SKIN: Wash with plenty of soap and water. 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. Take off contaminated clothing and wash before reuse.  
**Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.  
**Disposal:** Dispose of contents/container in accordance with local regulation.

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