

## ZEP AEROSOLVE II AERO

Version 2.1

Revision Date 03/13/2015

Print Date 06/03/2015

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP AEROSOLVE II AERO

Material number : 00000000000018100

#### 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 compressed gas |
| Colour     | colourless                          |
| Odour      | mild                                |

#### GHS Classification

Gases under pressure : Compressed gas  
 Skin irritation : Category 2  
 Eye irritation : Category 2A  
 Carcinogenicity : Category 1A  
 Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

#### GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H280 Contains gas under pressure; may explode if heated.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.  
 H350 May cause cancer.

Precautionary statements : **Prevention:**  
 P201 Obtain special instructions before use.

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P202 Do not handle until all safety precautions have been read and understood.

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

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection/ face protection.

P280 Wear protective gloves.

P281 Use personal protective equipment as required.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P332 + P313 If skin irritation 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:**

P405 Store locked up.

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

**Disposal:**

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

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

|              |   |         |
|--------------|---|---------|
| <b>IARC</b>  | Group 1: Carcinogenic to humans   |         |
|              | trichloroethylene   | 79-01-6 |
| <b>ACGIH</b> | Suspected human carcinogen  |         |
|              | trichloroethylene   | 79-01-6 |
| <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>   | Reasonably anticipated to be a human carcinogen   |         |
|              | trichloroethylene   | 79-01-6 |

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

Substance / Mixture : Mixture

**Hazardous components**

| Chemical Name     | CAS-No.  | Concentration [%] |
|-------------------|----------|-------------------|
| trichloroethylene | 79-01-6  | >= 90 - <= 100    |
| carbon dioxide    | 124-38-9 | >= 1 - < 5        |

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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 : Remove person to fresh air. If signs/symptoms continue, get medical attention.
- In case of skin contact : If skin irritation persists, call a physician.  
Wash off immediately with plenty of water for at least 15 minutes.  
If on clothes, remove clothes.
- 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 : DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
Keep respiratory tract clear.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
Take victim immediately to hospital.
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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Dry chemical  
Water spray jet  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)
- 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  
Chlorine compounds
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Prevent fire extinguishing water from contaminating surface water or the ground water system.  
For safety reasons in case of fire, cans should be stored
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separately in closed containments.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Refer to protective measures listed in sections 7 and 8.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
Evacuate personnel to safe areas.  
Remove all sources of ignition.

Environmental precautions : Prevent further leakage or spillage.  
Clean contaminated floors and objects thoroughly while observing environmental regulations.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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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.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Always replace cap after use.  
Dispose of rinse water in accordance with local and national regulations.  
Do not breathe vapours or spray mist.  
Take precautionary measures against static discharges.

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.  
Observe label precautions.  
Keep in a dry, cool and well-ventilated place.  
Electrical installations / working materials must comply with the technological safety standards.  
No smoking.

Materials to avoid : Oxidizing agents  
Keep away from metals.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Components with workplace control parameters**

| Components        | CAS-No.  | Value type<br>(Form of exposure) | Control parameters / Permissible concentration | Basis     |
|-------------------|----------|----------------------------------|--|-----------|
| trichloroethylene | 79-01-6  | TWA                              | 10 ppm   | ACGIH     |
|                   |          | STEL                             | 25 ppm   | ACGIH     |
|                   |          | TWA                              | 100 ppm  | OSHA Z-2  |
|                   |          | CEIL                             | 200 ppm  | OSHA Z-2  |
|                   |          | Peak                             | 300 ppm  | OSHA Z-2  |
|                   |          | TWA                              | 50 ppm<br>270 mg/m <sup>3</sup>                | OSHA P0   |
|                   |          | STEL                             | 200 ppm<br>1,080 mg/m <sup>3</sup>             | OSHA P0   |
|                   |          |                                  |  |           |
| carbon dioxide    | 124-38-9 | TWA                              | 5,000 ppm                                      | ACGIH     |
|                   |          | STEL                             | 30,000 ppm                                     | ACGIH     |
|                   |          | TWA                              | 5,000 ppm<br>9,000 mg/m <sup>3</sup>           | NIOSH REL |
|                   |          | ST                               | 30,000 ppm<br>54,000 mg/m <sup>3</sup>         | NIOSH REL |
|                   |          | TWA                              | 5,000 ppm<br>9,000 mg/m <sup>3</sup>           | OSHA Z-1  |
|                   |          | TWA                              | 10,000 ppm<br>18,000 mg/m <sup>3</sup>         | OSHA P0   |
|                   |          | STEL                             | 30,000 ppm<br>54,000 mg/m <sup>3</sup>         | OSHA P0   |

**Biological occupational exposure limits**

| Component         | CAS-No. | Control parameters   | Biological specimen | Sampling time                   | Permissible concentration | Basis     |
|-------------------|---------|----------------------|---------------------|---------------------------------|---------------------------|-----------|
| TRICHLOROETHYLENE | 79-01-6 | Trichloroacetic acid | Urine               | End of shift at end of workweek | 15 mg/l                   | ACGIH BEI |
| TRICHLOROETHYLENE |         | Trichloroethanol     | In blood            | End of shift at end of workweek | 0.5 mg/l                  | ACGIH BEI |
| TRICHLOROETHYLENE |         | Trichloroethylene    | In blood            | End of shift at end of workweek |                           | ACGIH BEI |
| TRICHLOROETHYLENE |         | Trichloroethylene    | In end-exhaled air  | End of shift at end of workweek |                           | ACGIH BEI |

**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.

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|                            |   |
|----------------------------|---|
| Hand protection<br>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.<br>Tightly fitting safety goggles              |
| Skin and body protection   | : impervious clothing<br>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.<br>When using do not smoke.<br>Wash hands before breaks and at the end of workday.                    |

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

|  |                                       |
|--|---------------------------------------|
| Appearance                             | : Aerosol containing a compressed gas |
| Colour                                 | : colourless                          |
| Odour                                  | : mild                                |
| Odour Threshold                        | : no data available                   |
| pH                                     | : not applicable                      |
| Melting point/freezing point           | : no data available                   |
| Boiling point                          | : 87.22 °C                            |
| Flash point                            | :<br>not applicable                   |
| Evaporation rate                       | : < 1                                 |
| Flammability (solid, gas)              | : The product is not flammable.       |
| Upper explosion limit                  | : not applicable                      |
| Lower explosion limit                  | : not applicable                      |
| Vapour pressure                        | : not applicable                      |
| Relative vapour density                | : no data available                   |
| Density                                | : 1.46 g/cm <sup>3</sup>              |
| Solubility(ies)                        |                                       |
| Water solubility                       | : insoluble                           |
| Solubility in other solvents           | : not determined                      |
| Partition coefficient: n-octanol/water | : no data available                   |
| Auto-ignition temperature              | : not determined                      |

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Thermal decomposition : no data available

Viscosity

Viscosity, kinematic : no data available

Heat of combustion : 6.98 kJ/g

**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.  
Extremes of temperature and direct sunlight.

Incompatible materials : Oxidizing agents  
Light and/or alkaline metals

Hazardous decomposition products : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).  
Phosgene  
Hydrogen chloride gas

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

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

**Components:****trichloroethylene:**

Acute oral toxicity : LD50 Oral rat: 4,920 mg/kg

Acute inhalation toxicity : LC50 mouse: 8450 ppm  
Exposure time: 4 h

Acute dermal toxicity : LD50 Dermal rabbit: > 20,000 mg/kg

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

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Remarks: May cause skin irritation in susceptible persons.

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

Remarks: Eye irritation

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**trichloroethylene:**  
**carbon dioxide:**

**STOT - single exposure**

no data available

**STOT - repeated exposure**

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****Product:**

Partition coefficient: n- : Remarks: no data available  
octanol/water

**Components:**

**trichloroethylene :**



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Partition coefficient: n-  
octanol/water : log Pow: 2.29

### 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 : no data available

## 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: 49 CFR (USA):  
ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):  
UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IATA (Cargo Air):  
UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IATA (Passenger Air):  
UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

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 Transportation Regulation: TDG (Canada):  
 UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

**SECTION 15. REGULATORY INFORMATION**
**EPCRA - Emergency Planning and Community Right-to-Know Act**
**CERCLA Reportable Quantity**

| Components        | CAS-No. | Component RQ<br>(lbs) | Calculated product RQ<br>(lbs) |
|-------------------|---------|-----------------------|--------------------------------|
| trichloroethylene | 79-01-6 | 100                   | 103                            |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard  
 Chronic Health Hazard  
 Sudden Release of Pressure Hazard

**SARA 302** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:  
 trichloroethylene 79-01-6 96.83 %

**California Prop 65** WARNING! This product contains a chemical known to the State of California to cause cancer.  
 trichloroethylene 79-01-6

**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**

## ZEP AEROSOLVE II AERO

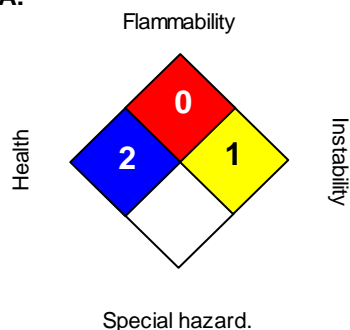
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## Further information

## NFPA:



## HMIS III:

|                 |   |
|-----------------|---|
| HEALTH          | 2 |
| FLAMMABILITY    | 0 |
| PHYSICAL HAZARD | 2 |

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

## OSHA GHS Label Information:

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause cancer.

Precautionary statements

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/ face protection. Wear protective gloves. Use personal protective equipment as required.

**Response:** IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/ attention. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

**Storage:** Store locked up. Protect from sunlight. Store in a well-ventilated place.

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

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