

ORANGE GEL AEROSOL DEGREASER AERO DZ

Version 2.0

Revision Date 04/19/2017

Print Date 06/02/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ORANGE GEL AEROSOL DEGREASER AERO DZ

Material number : 000000000000000101

Manufacturer or supplier's details

Company : Zep Inc.

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

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 : Degreaser

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

| | |
|------------|------------------------------------|
| Appearance | Aerosol containing a liquefied gas |
| Colour | amber |
| Odour | characteristic |

GHS ClassificationFlammable aerosols : Category 1
Gases under pressure : Liquefied gas
Skin irritation : Category 2
Serious eye damage : Category 1
Skin sensitisation : Category 1**GHS label elements**

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.
H318 Causes serious eye damage.Precautionary statements : **Prevention:**

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P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 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 protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of 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.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
P403 Store in a well-ventilated place.

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 [%] |
|-------------------------------|------------|-------------------|
| Citrus, ext. | 94266-47-4 | >= 70 - < 90 |
| butane | 106-97-8 | >= 10 - < 20 |
| propane | 74-98-6 | >= 1 - < 5 |
| 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.

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 : Wash off immediately with plenty of water for at least 15 minutes.

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|---|---|
| | <p>Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.</p> |
| In case of eye contact | <p>: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.</p> |
| If swallowed | <p>: 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.</p> |
| Most important symptoms and effects, both acute and delayed | <p>: Effects are immediate and delayed. Effects are dependent on exposure (dose, concentration, contact time). Symptoms may include blistering, irritation, burns, and pain. Causes serious eye damage. Causes skin irritation. Review section 2 of SDS to see all potential hazards.</p> |
| Notes to physician | <p>: Treat symptomatically. Symptoms may be delayed.</p> |

SECTION 5. FIREFIGHTING MEASURES

| | |
|--------------------------------------|---|
| Suitable extinguishing media | <p>: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical Water spray</p> |
| Unsuitable extinguishing media | <p>: High volume water jet</p> |
| Specific hazards during firefighting | <p>: Do not allow run-off from fire fighting to enter drains or water courses.</p> |
| Hazardous combustion products | <p>: Carbon dioxide (CO2) Carbon monoxide Smoke Nitrogen oxides (NOx)</p> |
| Specific extinguishing methods | <p>: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.</p> |
| Further information | <p>: 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</p> |

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separately in closed containments.
Use water spray to cool unopened 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.
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.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid exposure - obtain special instructions before use.
Do not breathe vapours or spray mist.
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.
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.
Observe label precautions.
Keep in a dry, cool and well-ventilated place.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Strong oxidizing agents

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|------------|----------|----------------------------------|---|-----------|
| butane | 106-97-8 | TWA | 800 ppm 1,900 mg/m ³ | NIOSH REL |
| | | TWA | 800 ppm 1,900 mg/m ³ | OSHA P0 |
| | | PEL | 800 ppm 1,900 mg/m ³ | CAL PEL |
| propane | 74-98-6 | TWA | 1,000 ppm | ACGIH |
| | | TWA | 1,000 ppm 1,800 mg/m ³ | NIOSH REL |
| | | TWA | 1,000 ppm 1,800 mg/m ³ | OSHA Z-1 |
| | | TWA | 1,000 ppm 1,800 mg/m ³ | OSHA P0 |
| | | PEL | 1,000 ppm 1,800 mg/m ³ | CAL PEL |

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

Remarks

: Protective gloves

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

Eye protection

: Tightly fitting safety goggles

Ensure that eyewash stations and safety showers are close to the workstation location.

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

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| | |
|--|--------------------------------|
| Colour | : amber |
| Odour | : characteristic |
| Odour Threshold | : No data available |
| pH | : Not applicable |
| Melting point/freezing point | : No data available |
| Boiling point | : 76.7 °C |
| Flash point | : Not applicable |
| Evaporation rate | : No data available |
| Flammability (solid, gas) | : Extremely flammable aerosol. |
| Upper explosion limit | : No data available |
| Lower explosion limit | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density | : No data available |
| Density | : 0.861 g/cm3 |
| Solubility(ies) | |
| Water solubility | : insoluble |
| Partition coefficient: n-octanol/water | : No data available |
| Auto-ignition temperature | : not determined |
| Thermal decomposition | : No data available |
| Viscosity | |
| Viscosity, kinematic | : No data available |
| Heat of combustion | : > 30 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 | : Strong oxidizing agents |
| Hazardous decomposition products | : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Organic Substances |

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SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition : None known.

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

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 identified as a carcinogen or potential carcinogen by OSHA.

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

Components:**butane:**

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

LC50 Rat: 1,355 mg/l

propane:

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

LC50 Rat: 658 mg/l
Exposure time: 4 h

LC50 Rat: 1,355 mg/l

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Alcohols, C9-11, ethoxylated:

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

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

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.:

butane:

propane:

Alcohols, C9-11, ethoxylated:

Alcohols, C12-16, ethoxylated:

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

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No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

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

Components:**butane :**

Partition coefficient: n-octanol/water : Pow: 2.89

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 |
|---|

SAFETY DATA SHEET



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

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

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---------------|---------|-----------------------|--------------------------------|
| methyloxirane | 75-56-9 | 100 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---------------|---------|-----------------------|--------------------------------|
| methyloxirane | 75-56-9 | 100 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : Fire Hazard
Sudden Release of Pressure 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 WARNING! This product contains a chemical known to the State of California to cause cancer.

quartz (SiO₂)
methyloxirane

14808-60-7
75-56-9

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

TSCA On TSCA Inventory
DSL All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

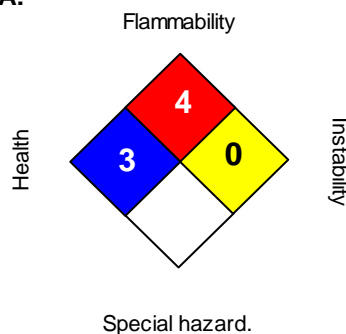
Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

| | |
|-----------------|---|
| HEALTH | 3 |
| FLAMMABILITY | 4 |
| PHYSICAL HAZARD | 2 |

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

OSHA - GHS Label Information:

Hazard pictograms



Signal word

Hazard statements

Precautionary statements

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

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. 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 protective gloves/ protective clothing/ eye protection/ face protection.

Response: IF ON SKIN: Wash with plenty of 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. If skin irritation or rash occurs: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store in a well-ventilated place.

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

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