

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : Zep Dazzle Aero DZ
 Material number : 00000000000022001

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 |

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

| | |
|------------|------------------------------------|
| Appearance | Aerosol containing a liquefied gas |
| Colour | milky |
| Odour | pleasant |

GHS Classification

Gases under pressure : Liquefied gas
 Eye irritation : Category 2A

GHS Label element

Hazard pictograms : 

Signal word : Warning

Hazard statements : H280 Contains gas under pressure; may explode if heated.
 H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
 P264 Wash skin thoroughly after handling.
 P280 Wear eye protection/ face protection.
Response:
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

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

Potential Health Effects**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 | Confirmed animal carcinogen with unknown relevance to humans 2-butoxyethanol 111-76-2 |
| 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. |

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

| Chemical Name | CAS-No. | Concentration [%] |
|-----------------|-----------|-------------------|
| ethanol | 64-17-5 | >= 5 - < 10 |
| butane | 106-97-8 | >= 1 - < 5 |
| propan-2-ol | 67-63-0 | >= 1 - < 5 |
| 2-butoxyethanol | 111-76-2 | >= 1 - < 5 |
| sodium nitrite | 7632-00-0 | >= 0.1 - < 1 |

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. If symptoms persist, call a physician. |
| 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. If in eyes, rinse with water for 15 minutes. |
| If swallowed | : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. |

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

If symptoms persist, call a physician.
DO NOT induce vomiting unless directed to do so by a
physician or poison control center.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
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 (CO₂)
Carbon monoxide
Smoke
Silicon oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 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.
Evacuate personnel to safe areas.
Remove all sources of ignition.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Neutralise with acid.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Always replace cap after use.

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

Dispose of rinse water in accordance with local and national regulations.

Do not breathe vapours or spray mist.

Avoid exposure - obtain special instructions before use.

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.

Materials to avoid : Oxidizing agents
Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|-----------------|----------|----------------------------------|---|-----------|
| ethanol | 64-17-5 | TWA | 1,000 ppm | ACGIH |
| | | TWA | 1,000 ppm 1,900 mg/m ³ | NIOSH REL |
| | | TWA | 1,000 ppm 1,900 mg/m ³ | OSHA Z-1 |
| | | TWA | 1,000 ppm 1,900 mg/m ³ | OSHA P0 |
| butane | 106-97-8 | TWA | 800 ppm 1,900 mg/m ³ | NIOSH REL |
| | | TWA | 800 ppm 1,900 mg/m ³ | OSHA P0 |
| propan-2-ol | 67-63-0 | TWA | 200 ppm | ACGIH |
| | | STEL | 400 ppm | ACGIH |
| | | TWA | 400 ppm 980 mg/m ³ | NIOSH REL |
| | | ST | 500 ppm 1,225 mg/m ³ | NIOSH REL |
| | | TWA | 400 ppm 980 mg/m ³ | OSHA Z-1 |
| | | TWA | 400 ppm 980 mg/m ³ | OSHA P0 |
| 2-butoxyethanol | 111-76-2 | STEL | 500 ppm 1,225 mg/m ³ | OSHA P0 |
| | | TWA | 20 ppm | ACGIH |
| | | TWA | 5 ppm 24 mg/m ³ | NIOSH REL |
| | | TWA | 50 ppm 240 mg/m ³ | OSHA Z-1 |
| | | TWA | 25 ppm 120 mg/m ³ | OSHA P0 |

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

Biological occupational exposure limits

| Component | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|---------------------|----------|-------------------------|---------------------|--|---------------------------|-----------|
| PROPAN-2-OL | 67-63-0 | Acetone | Urine | End of shift at end of workweek | 40 mg/l | ACGIH BEI |
| 2-BUTOXYETHANOL | 111-76-2 | Butoxyacetic acid (BAA) | Urine | End of shift (As soon as possible after exposure ceases) | 200 mg/g | ACGIH BEI |
| Remarks: Creatinine | | | | | | |

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 : Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.
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
- Colour : milky
- Odour : pleasant
- pH : 10.06 - 11.06
- Melting point/freezing point : Not applicable
- Boiling point : not determined
- Flash point :

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

| | |
|--|---|
| | No data available |
| Evaporation rate | : No data available |
| Flammability (solid, gas) | : The product is not flammable. |
| Upper explosion limit | : No data available |
| Lower explosion limit | : No data available |
| Vapour pressure | : not determined |
| Density | : 0.98 g/cm ³ |
| Solubility(ies) | |
| Water solubility | : soluble in hot water, soluble in cold water |
| Solubility in other solvents | : soluble |
| 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 | : < 20 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 | : Extremes of temperature and direct sunlight. Heat, flames and sparks. |
| Incompatible materials | : Oxidizing agents |
| Hazardous decomposition products | : Carbon oxides |

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

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

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

Acute inhalation toxicity : Acute toxicity estimate : > 10 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

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

Components:**ethanol:**

Acute oral toxicity : LD50 Oral Rat: 7,060 mg/kg
Acute inhalation toxicity : LC50 Rat: 124.7 mg/l
Exposure time: 4 h

butane:

Acute inhalation toxicity : LC50 Mouse: 1,237 mg/l
Exposure time: 2 h
LC50 Rat: 1,355 mg/l

propan-2-ol:

Acute oral toxicity : LD50 Oral Rat: 4,396 mg/kg
Method: Calculation method

Skin corrosion/irritation**Product:**

Remarks: May cause skin irritation and/or dermatitis.

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

Remarks: Severe eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

ethanol:**butane:****propan-2-ol:**

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

2-butoxyethanol:
sodium nitrite:

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**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**Partition coefficient: n- : Remarks: No data available
octanol/water**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

: No data available

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : Do not dispose of waste into sewer.
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

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 (lbs) | Calculated product RQ (lbs) |
|----------------|-----------|--------------------|-----------------------------|
| sodium nitrite | 7632-00-0 | 100 | * |

*: 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 : Sudden Release of Pressure Hazard
Acute Health Hazard

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

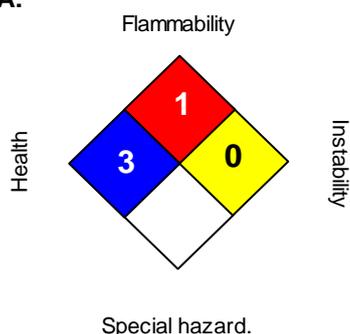
- SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
- California Prop 65** WARNING! This product contains a chemical known to the State of California to cause cancer.
- 2,2'-iminodiethanol 111-42-2
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
- methanol 67-56-1

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

- TSCA** On TSCA Inventory
- DSL** This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.
- 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), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION**Further information****NFPA:****HMIS III:**

| | |
|------------------------|----------|
| HEALTH | 3 |
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 2 |

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

OSHA GHS Label Information:

Zep Dazzle Aero DZ

Version 2.0

Revision Date 07/13/2015

Print Date 05/09/2016

Hazard pictograms



Signal word

Hazard statements

Precautionary statements

: **Warning:**
 : Contains gas under pressure; may explode if heated. Causes serious eye irritation.
 :
 : **Prevention:** Wash skin thoroughly after handling. Wear eye protection/ face protection.
Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.
Storage: Protect from sunlight. Store in a well-ventilated place.

| | |
|----------------|------------|
| Version: | 2.0 |
| Revision Date: | 07/13/2015 |
| Print Date: | 05/09/2016 |

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next 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.