

## ZEPSTART AERO DZ

Version 1.1

Revision Date 09/25/2015

Print Date 06/30/2016

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEPSTART AERO DZ

Material number : 000000000000030601

**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 compressed gas
Colour	colourless
Odour	odourless

**GHS Classification**Flammable gases : Category 1  
Gases under pressure : Compressed gas  
Acute toxicity (Oral) : Category 4  
Skin irritation : Category 2  
Specific target organ toxicity -  
single exposure : Category 3  
Aspiration hazard : 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.  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H304 May be fatal if swallowed and enters airways.

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## Precautionary statements

: **Prevention:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P210 Keep away from heat/sparks/open flames/hot surfaces.  
No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Pressurized container: Do not pierce or burn, even after use.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves.  
P271 Use only outdoors or in a well-ventilated area.

**Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.  
P331 Do NOT induce vomiting.  
P330 Rinse mouth.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.  
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P410 Protect from sunlight.  
P405 Store locked up.

**Disposal:**

Dispose of contents/container in accordance with local regulation.

## 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.

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.

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.

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.

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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 [%]
heptane	142-82-5	>= 70 - < 90
diethyl ether	60-29-7	>= 30 - < 50
carbon dioxide	124-38-9	>= 10 - < 20

**SECTION 4. FIRST AID MEASURES**

- General advice : Do not leave the victim unattended.  
Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.
- If inhaled : If breathed in, move person into fresh air.  
If breathing is difficult, give oxygen.  
If not breathing, give artificial respiration.  
Call a physician or poison control centre immediately.
- 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 clothing before reuse.  
Call a physician if irritation develops or persists.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.  
If eye irritation persists, consult a specialist.  
Rinse immediately with plenty of water for at least 15 minutes.  
Keep eye wide open while rinsing.
- If swallowed : Keep respiratory tract clear.  
Never give anything by mouth to an unconscious person.  
DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
If swallowed, call a poison control centre or doctor immediately.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder
- Unsuitable extinguishing media : No information available.

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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
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.

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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. 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. Prevent product from entering drains. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Shovel into suitable container for disposal.

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**SECTION 7. HANDLING AND STORAGE**

Advice on safe handling	: Keep away from fire, sparks and heated surfaces. For personal protection see section 8. Avoid exposure - obtain special instructions before use. Smoking, eating and drinking should be prohibited in the application area. Always replace cap after use. Avoid contact with skin and eyes. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Do not breathe vapours or spray mist.
Conditions for safe storage	: Electrical installations / working materials must comply with the technological safety standards. 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.

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No smoking.  
Keep in a dry, cool and well-ventilated place.  
Observe label precautions.

Materials to avoid : Strong 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
heptane	142-82-5	TWA	85 ppm 350 mg/m <sup>3</sup>	NIOSH REL
		C	440 ppm 1,800 mg/m <sup>3</sup>	NIOSH REL
		TWA	500 ppm 2,000 mg/m <sup>3</sup>	OSHA Z-1
		TWA	400 ppm 1,600 mg/m <sup>3</sup>	OSHA P0
		STEL	500 ppm 2,000 mg/m <sup>3</sup>	OSHA P0
diethyl ether	60-29-7	TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
		TWA	400 ppm 1,200 mg/m <sup>3</sup>	OSHA Z-1
		TWA	400 ppm 1,200 mg/m <sup>3</sup>	OSHA P0
		STEL	500 ppm 1,500 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 9,000 mg/m <sup>3</sup>	NIOSH REL
		ST	30,000 ppm 54,000 mg/m <sup>3</sup>	NIOSH REL
		TWA	5,000 ppm 9,000 mg/m <sup>3</sup>	OSHA Z-1
		TWA	10,000 ppm 18,000 mg/m <sup>3</sup>	OSHA P0
		STEL	30,000 ppm 54,000 mg/m <sup>3</sup>	OSHA P0
heptane	142-82-5	TWA	85 ppm 350 mg/m <sup>3</sup>	NIOSH REL
		C	440 ppm 1,800 mg/m <sup>3</sup>	NIOSH REL
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		TWA	400 ppm 1,600 mg/m <sup>3</sup>	OSHA P0
		STEL	500 ppm 2,000 mg/m <sup>3</sup>	OSHA P0

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		STEL	500 ppm	ACGIH
		TWA	400 ppm 1,200 mg/m3	OSHA Z-1
		TWA	400 ppm 1,200 mg/m3	OSHA P0
		STEL	500 ppm 1,500 mg/m3	OSHA P0
carbon dioxide	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		TWA	5,000 ppm 9,000 mg/m3	NIOSH REL
		ST	30,000 ppm 54,000 mg/m3	NIOSH REL
		TWA	5,000 ppm 9,000 mg/m3	OSHA Z-1
		TWA	10,000 ppm 18,000 mg/m3	OSHA P0
		STEL	30,000 ppm 54,000 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  
Material : Solvent-resistant gloves
- Eye protection : Safety glasses  
Ensure that eyewash stations and safety showers are close to the workstation location.
- Skin and body protection : Protective suit
- Hygiene measures : When using do not smoke.  
When using do not eat or drink.  
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 : odourless
- Odour Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available
- Boiling point : 95 - 200 °C
- Flash point :

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	No data available
Evaporation rate	: > 1 n-Butyl Acetate = 1.0
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.7 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: slightly 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

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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	: Amines Strong oxidizing agents
Hazardous decomposition products	: Carbon oxides

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SECTION 11. TOXICOLOGICAL INFORMATION

## Acute toxicity

Components:heptane:

Acute inhalation toxicity	: LC50 Rat: 103,000 mg/l Exposure time: 4 h
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## Skin corrosion/irritation

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### Product:

Remarks: Irritating to skin.

### Serious eye damage/eye irritation

No data available

### Respiratory or skin sensitisation

No data available

### Germ cell mutagenicity

No data available

### Carcinogenicity

No data available

### Reproductive toxicity

No data available

heptane:

diethyl ether:

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:

heptane :

|| Partition coefficient: n- : log Pow: > 3.0



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octanol/water

log Pow: 5

diethyl ether :

Partition coefficient: n-  
octanol/water

: log Pow: 1.1

### Mobility in soil

No data available

### Other adverse effects

No data available

#### Product:

Additional ecological : No data available  
information

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.  
Empty remaining contents.  
Dispose of as unused product.

## 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, FLAMMABLE, 2.1, (LQ), - Limited quantity

## SECTION 15. REGULATORY INFORMATION

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

**CERCLA Reportable Quantity**

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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** : Acute Health Hazard  
Sudden Release of Pressure Hazard  
Fire 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.  
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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

<b>TSCA</b>	On TSCA Inventory
<b>DSL</b>	Not in compliance with the inventory
<b>AICS</b>	Not in compliance with the inventory
<b>NZIoC</b>	Not in compliance with the inventory
<b>PICCS</b>	Not in compliance with the inventory
<b>IECSC</b>	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)

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**SECTION 16. OTHER INFORMATION**

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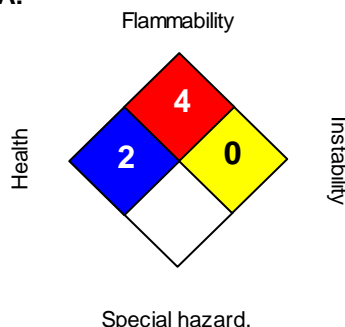
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## Further information

## NFPA:



## HMIS III:

HEALTH	2
FLAMMABILITY	4
PHYSICAL HAZARD	0

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.  
Harmful if swallowed. Causes skin irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.

Precautionary statements

: **Prevention:** Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. 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. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves. Use only outdoors or in a well-ventilated area.  
**Response:** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. 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.  
**Storage:** Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store locked up.  
**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

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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.