

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP I D RED AERO DZ

Material number : 00000000000009601

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 compressed gas
Colour	clear
Odour	hydrocarbon-like

GHS Classification

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

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.
 H336 May cause drowsiness or dizziness.
 H370 Causes damage to organs.

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

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.
 P251 Pressurized container: Do not pierce or burn, even after use.
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves.

Response:
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
 P307 + P311 IF exposed: Call a POISON CENTER or doctor/physician.
 P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.

Storage:
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
Naphtha (petroleum), hydrotreated light	64742-49-0	>= 70 - < 90
ethanol	64-17-5	>= 5 - < 10
carbon dioxide	124-38-9	>= 1 - < 5
heptane	142-82-5	>= 1 - < 5
methanol	67-56-1	>= 1 - < 5
propan-2-ol	67-63-0	>= 1 - < 5

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 : Consult a physician after significant exposure.
 If unconscious place in recovery position and seek medical advice.

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

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	: 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.
Most important symptoms and effects, both acute and delayed	: Effects are immediate and delayed. Symptoms of overexposure may include disorientation; dizziness; and confusion. May progress to unconsciousness, paralysis, and convulsions. Symptoms may include irritation, redness, pain, and rash. Effects are dependent on exposure (dose, concentration, contact time). Causes skin irritation. May cause drowsiness or dizziness. Review section 2 of SDS to see all potential hazards.
Notes to physician	: Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Dry chemical Water spray jet Carbon dioxide (CO2) Alcohol-resistant foam
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
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	: 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.

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed 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.
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 dry, cool and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline materials.

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

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
		STEL	1,000 ppm	ACGIH
		PEL	1,000 ppm 1,900 mg/m ³	CAL PEL
carbon dioxide	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		TWA	5,000 ppm 9,000 mg/m ³	NIOSH REL
		ST	30,000 ppm 54,000 mg/m ³	NIOSH REL
		TWA	5,000 ppm 9,000 mg/m ³	OSHA Z-1
		TWA	10,000 ppm 18,000 mg/m ³	OSHA P0
		STEL	30,000 ppm 54,000 mg/m ³	OSHA P0
		PEL	5,000 ppm 9,000 mg/m ³	CAL PEL
		STEL	30,000 ppm 54,000 mg/m ³	CAL PEL
		heptane	142-82-5	TWA
C	440 ppm 1,800 mg/m ³			NIOSH REL
TWA	500 ppm 2,000 mg/m ³			OSHA Z-1
TWA	400 ppm 1,600 mg/m ³			OSHA P0
STEL	500 ppm 2,000 mg/m ³			OSHA P0
PEL	400 ppm 1,600 mg/m ³			CAL PEL
STEL	500 ppm 2,000 mg/m ³			CAL PEL
methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m ³	NIOSH REL
		ST	250 ppm 325 mg/m ³	NIOSH REL
		TWA	200 ppm 260 mg/m ³	OSHA Z-1

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

		STEL	250 ppm 325 mg/m ³	OSHA P0
		TWA	200 ppm 260 mg/m ³	OSHA P0
		C	1,000 ppm	CAL PEL
		PEL	200 ppm 260 mg/m ³	CAL PEL
		STEL	250 ppm 325 mg/m ³	CAL PEL
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
		STEL	500 ppm 1,225 mg/m ³	OSHA P0
		PEL	400 ppm 980 mg/m ³	CAL PEL
		STEL	500 ppm 1,225 mg/m ³	CAL PEL

Hazardous components without workplace control parameters

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI
METHYLBENZENE	108-88-3	Toluene	In blood	Prior to last shift of workweek	0.02 mg/l	ACGIH BEI
METHYLBENZENE		Toluene	Urine	End of shift (As soon as possible after exposure ceases)	0.03 mg/l	ACGIH BEI
METHYLBENZENE		o-Cresol	Urine	End of shift (As soon as possible after exposure ceases)	0.3.mg/g Creatinine	ACGIH BEI
PROPAN-2-OL	67-63-0	Acetone	Urine	End of	40 mg/l	ACGIH BEI

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

				shift at end of workweek		
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workweek	40 mg/l	ACGIH BEI

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 : Protective gloves

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 compressed gas

Colour : clear

Odour : hydrocarbon-like

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point : No data available

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

Flash point	: -18 °C
Evaporation rate	: > 1 n-Butyl Acetate = 1.0
Flammability (solid, gas)	: Extremely flammable aerosol.
Upper explosion limit	: 6.7 %(V)
Lower explosion limit	: 1.2 %(V)
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.69 g/cm ³
Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: not determined
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	: 40.71 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).

SECTION 11. TOXICOLOGICAL INFORMATION**Potential Health Effects**

- Aggravated Medical Condition : None known.
- Symptoms of Overexposure : Effects are immediate and delayed.
Symptoms of overexposure may include disorientation; dizziness; and confusion. May progress to unconsciousness, paralysis, and convulsions.
- Symptoms may include irritation, redness, pain, and rash.
Effects are dependent on exposure (dose, concentration, contact time).

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.
- 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 : 3,552 mg/kg
Method: Calculation method
- Acute inhalation toxicity : Acute toxicity estimate : 17.95 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

heptane:

- Acute inhalation toxicity : LC50 Rat: 103 mg/l
Exposure time: 4 h

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

propan-2-ol:

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

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: May irritate eyes.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Naphtha (petroleum), hydrotreated light:

ethanol:

carbon dioxide:

heptane:

methanol:

propan-2-ol:

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

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

Components:**heptane :**

Partition coefficient: n-octanol/water : log Pow: 5

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., Toxic to aquatic life with long lasting effects.

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.

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

SECTION 14. TRANSPORT INFORMATION

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

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)
methanol	67-56-1	5000	*

*: 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 : 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 : The following components are subject to reporting levels established by SARA Title III, Section 313:
methanol 67-56-1 2.7858 %

California Prop 65 WARNING! This product contains a chemical known to the

ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

benzene	State of California to cause cancer.	71-43-2
	WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.	
methanol		67-56-1
toluene		108-88-3
benzene		71-43-2

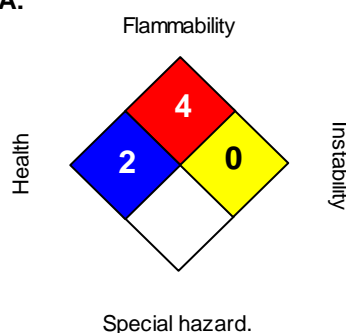
The components of this product are reported in the following inventories:

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

: **Danger:**

Hazard statements

: Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. May cause drowsiness or dizziness. Causes damage to organs.

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. Do not breathe dust/fume/gas/mist/vapours/spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves.
Response: IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor

SAFETY DATA SHEET



ZEP I D RED AERO DZ

Version 5.0

Revision Date 04/24/2017

Print Date 12/18/2017

if you feel unwell. IF exposed: Call a POISON CENTER or doctor/physician. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

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

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

Version:	5.0
Revision Date:	04/24/2017
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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 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.