

ZEP FOAMING COIL CLEANER AERO DZ

Version 1.0

Revision Date 01/30/2015

Print Date 09/13/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP FOAMING COIL CLEANER AERO DZ

Material number : 000000000000020201

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	colourless, clear
Odour	characteristic

GHS Classification

Gases under pressure : Liquefied gas

GHS Label element

Hazard pictograms :



Signal word : Warning

Hazard statements : H280 Contains gas under pressure; may explode if heated.

Precautionary statements : **Storage:**
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.

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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.

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

Chemical Name	CAS-No.	Concentration [%]
1-(1-methyl-2-propoxyethoxy)propan-2-ol	29911-27-1	$\geq 1 - < 5$
butane	106-97-8	$\geq 1 - < 5$
propane-1,2-diol	57-55-6	$\geq 1 - < 5$
propane	74-98-6	$\geq 1 - < 5$
sodium nitrite	7632-00-0	$\geq 0.1 - < 1$

SECTION 4. FIRST AID MEASURES

General advice	: 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.
In case of eye contact	: Remove contact lenses. 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.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO ₂) Dry chemical
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.

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- 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 : Standard procedure for chemical fires.
- 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.
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 : 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 : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
- 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.
Keep container tightly closed in a dry and well-ventilated place.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Do not freeze.
Store and keep away from, oxidizing agents and acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of	Control parameters /	Basis
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		exposure)	Permissible concentration	
butane	106-97-8	TWA	800 ppm 1,900 mg/m ³	NIOSH REL
		TWA	800 ppm 1,900 mg/m ³	OSHA P0
propane-1,2-diol	57-55-6	TWA	10 mg/m ³	US WEEL
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

Personal protective equipment

- Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
- Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
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 : Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Aerosol containing a liquefied gas
- Colour : colourless, clear
- Odour : characteristic
- Odour Threshold : no data available
- pH : 11 - 12.2
- Melting point/freezing point : not applicable
- Boiling point : 100 °C
- Flash point :
not applicable
- Evaporation rate : 1
- Upper explosion limit : not applicable
- Lower explosion limit : not applicable

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Vapour pressure	: no data available
Relative vapour density	: no data available
Density	: 1.017 g/cm3
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

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.
Incompatible materials	: Oxidizing agents Acids
Hazardous decomposition products	: Carbon oxides Organic Substances

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

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

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

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no data available

Germ cell mutagenicity

no data available

Carcinogenicity**Product:**

Carcinogenicity - : Not classifiable as a human carcinogen.
Assessment

Reproductive toxicity

no data available

1-(1-methyl-2-propoxyethoxy)propan-2-ol:
butane:
propane-1,2-diol:
propane:
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

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:

1-(1-methyl-2-propoxyethoxy)propan-2-ol :
Partition coefficient: n- : Pow: 7.7

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octanol/water

butane :

Partition coefficient: n- : Pow: 2.89

octanol/water

propane-1,2-diol :

Partition coefficient: n- : log Pow: -1.07

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

no data available

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**International regulation****IATA-DGR**

UN/ID No. : 1950

Proper shipping name : Aerosols, non-flammable

Class : 2.2

Packing group : Not Assigned

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Labels : 2.2
Packing instruction (cargo aircraft) : 203
Packing instruction (passenger aircraft) : 203
IMDG-Code
UN number : 1950
Proper shipping name : AEROSOLS
Class : 2.2
Packing group : Not Assigned
Labels : 2.2
EmS Code : F-D, S-U
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR
UN/ID/NA number : 1950
Proper shipping name : Aerosols, non-flammable
Class : 2.2
Packing group : Not Assigned
Labels : 2.2
ERG Code : 126
Marine pollutant : no

Special precautions for user

not applicable

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

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

SARA 313 : 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.

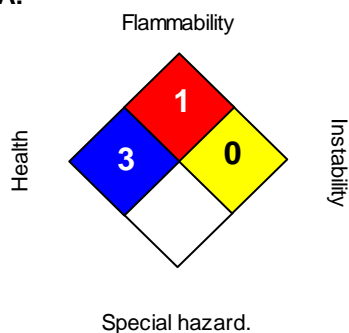
California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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
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:

Hazard pictograms



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Signal word : **Warning:**
Hazard statements : Contains gas under pressure; may explode if heated.
Precautionary statements :

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

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.