

**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : ZEP FOAMING COIL CLEANER AERO DZ

Material number : 00000000000020201

**Manufacturer or supplier's details**

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE  
Emerson, GA 30137

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** : CHEMTREC: 800-424-9300 - All Calls Recorded.**Emergency** : In the District of Columbia 202-483-7616**Recommended use of the chemical and restrictions on use**

Recommended use : Specialty Cleaner and Remover

**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance	Aerosol containing a liquefied gas
Colour	colourless, clear
Odour	characteristic

**GHS Classification**

Gases under pressure : Liquefied gas

Skin corrosion : Category 1

Serious eye damage : Category 1

**GHS label elements**

Hazard pictograms :



Signal word : Danger

Hazard statements : H280 Contains gas under pressure; may explode if heated.  
H314 Causes severe skin burns and eye damage.Precautionary statements : **Prevention:**  
P260 Do not breathe dust or mist.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

P251 Pressurized container: Do not pierce or burn, even after use.

**Response:**

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

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.

P363 Wash contaminated clothing 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:**

P501 Dispose of contents/container in accordance with local regulation.

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

Substance / Mixture : Mixture

**Hazardous components**

Chemical name	CAS-No.	Concentration [%]
1-(1-methyl-2-propoxyethoxy)propan-2-ol	29911-27-1	>= 3 - < 5
butane	106-97-8	>= 3 - < 5
propane-1,2-diol	57-55-6	>= 1 - < 3
propane	74-98-6	>= 1 - < 3

The exact percentages of disclosed substances are withheld as trade secrets.

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**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 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.  
If skin irritation persists, call a physician.
- In case of eye contact : Remove contact lenses.  
Rinse immediately with plenty of water for at least 15 minutes.

**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

- 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.
- Most important symptoms and effects, both acute and delayed : Effects are immediate and delayed.  
Effects are dependent on exposure (dose, concentration, contact time).  
Symptoms may include blistering, irritation, burns, and pain.  
Causes severe skin burns and eye damage.  
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
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.
- Hazardous combustion products : Carbon dioxide (CO<sub>2</sub>)  
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.

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**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.  
Prevent product from entering drains.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for : Soak up with inert absorbent material (e.g. sand, silica gel,

**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

containment and cleaning up 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.  
Dispose of rinse water in accordance with local and national regulations.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Always replace cap after use.  
Do not breathe vapours or spray mist.
- 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 in a dry, cool and well-ventilated place.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.  
No smoking.
- 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 exposure)	Control parameters / Permissible concentration	Basis
butane	106-97-8	TWA	800 ppm 1,900 mg/m <sup>3</sup>	NIOSH REL
		TWA	800 ppm 1,900 mg/m <sup>3</sup>	OSHA P0
		PEL	800 ppm 1,900 mg/m <sup>3</sup>	CAL PEL
propane-1,2-diol	57-55-6	TWA	10 mg/m <sup>3</sup>	US WEEL
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	OSHA Z-1
		TWA	1,000 ppm	OSHA P0

**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

			1,800 mg/m3	
		PEL	1,000 ppm 1,800 mg/m3	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

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.  
When using do not eat, drink or smoke.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : Aerosol containing a liquefied gas

Colour : colourless, clear

Odour : characteristic

Odour Threshold : No data available

pH : 12 - 13

Melting point/freezing point : Not applicable

Boiling point : 100 °C

Flash point :  
Not applicable

Evaporation rate : 1

Flammability (solid, gas) : Not classified as a flammability hazard

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : No data available

Relative vapour density : No data available

**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

Density	: 1.017 g/cm <sup>3</sup>
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	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Oxidizing agents Acids
Hazardous decomposition products	: Carbon oxides Organic Substances

**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:**

**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

<b>IARC</b>	Group 2A: Probably carcinogenic to humans	
	sodium nitrite	7632-00-0
<b>ACGIH</b>	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.	
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.	
<b>NTP</b>	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

**Skin corrosion/irritation****Product:**

Remarks: Causes skin burns.

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

Remarks: Risk of serious damage to eyes.

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information****Product:**

Remarks: No data available

**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

**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:****1-(1-methyl-2-propoxyethoxy)propan-2-ol :**Partition coefficient: n-  
octanol/water : Pow: 7.7**butane :**Partition coefficient: n-  
octanol/water : Pow: 2.89**propane-1,2-diol :**Partition coefficient: n-  
octanol/water : log Pow: -1.07**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  
SubstancesRemarks 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 : 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.



**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

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

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**

**TSCA list** : No substances are subject to a Significant New Use Rule.

The following substance(s) is/are subject to TSCA 12(b) export notification requirements:  
 sodium nitrite 7632-00-0

**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.

**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

- SARA 311/312 Hazards** : Gases under pressure  
Skin corrosion or irritation  
Serious eye damage or eye irritation
  
- 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 can expose you to chemicals including toluene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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

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

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

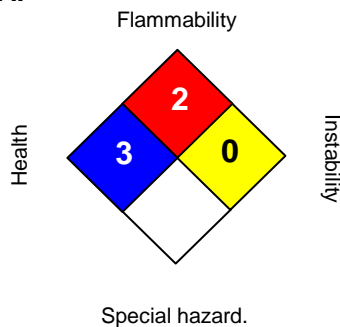
**Inventory Acronym and Validity Area Legend:**

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

**SECTION 16. OTHER INFORMATION**

**Further information**

**NFPA:**



**HMIS III:**

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>2</b>
<b>PHYSICAL HAZARD</b>	<b>3</b>

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

**OSHA - GHS Label Information:**

**ZEP FOAMING COIL CLEANER AERO DZ**

Version 3.0

Revision Date 04/23/2018

Print Date 04/26/2018

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Contains gas under pressure; may explode if heated. Causes severe skin burns and eye damage.

Precautionary statements

**Prevention:** Do not breathe dust or mist. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Pressurized container: Do not pierce or burn, even after use.

**Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. 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. Wash contaminated clothing 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.

Version:	3.0
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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.