

Version 3.0

Revision Date 08/31/2015

Print Date 06/27/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	ZEP REDI-GREASE AERO
Material number	:	00000000000011500
Manufacturer or supplier's o	leta	ils
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	:	CHEMTREC: 800-424-9300 - All Calls Recorded.
Emergency		In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a liquefied gas		
Colour	red		
Odour	solvent-like		

GHS Classification

:	Category 1 Liquefied gas Category 2 Category 2A Category 3 (Central nervous system)
:	Category 3 (Central nervous system)

GHS Label element

Hazard pictograms	
Signal word	: Danger
Hazard statements	 H222 Extremely flammable aerosol. H280 Contains gas under pressure; may explode if heated. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statements	: Prevention: P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.



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	P211 Do not spray on an open fla P251 Pressurized container: Do	
	use. P261 Avoid breathing dust/ fume, P264 Wash skin thoroughly after	
	P271 Use only outdoors or in a w P280 Wear eye protection/ face p P280 Wear protective gloves.	vell-ventilated area.
	Response:	
	P302 + P352 IF ON SKIN: Wash P304 + P340 + P312 IF INHALEI and keep at rest in a position cor POISON CENTER or doctor/ phy P305 + P351 + P338 IF IN EYES	D: Remove victim to fresh air nfortable for breathing. Call a vsician if you feel unwell.
	for several minutes. Remove con easy to do. Continue rinsing. P332 + P313 If skin irritation occ	tact lenses, if present and
	attention. P337 + P313 If eye irritation pers	
	attention. P362 Take off contaminated clot Storage:	-
	P403 + P233 Store in a well-venti tightly closed. P405 Store locked up.	ilated place. Keep container
	P410 + P412 Protect from sunlig temperatures exceeding 50 °C/ 1	
	Disposal: Dispose of contents/container in regulation.	accordance with local
Potential Health Effects		
Carcinogenicity:		
IARC	No component of this product preser equal to 0.1% is identified as probab human carcinogen by IARC.	8
ACGIH	No component of this product preser equal to 0.1% is identified as a carci	
OSHA	carcinogen by ACGIH. No component of this product preser equal to 0.1% is identified as a carci	
NTP	carcinogen by OSHA. No component of this product preser equal to 0.1% is identified as a know by NTP.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
Distillates (petroleum), hydrotreated heavy	64742-54-7	>= 20 - < 30



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paraffinic		
Naphtha (petroleum), hydrotreated light	64742-49-0	>= 20 - < 30
butane	106-97-8	>= 10 - < 20
acetone	67-64-1	>= 10 - < 20
propane	74-98-6	>= 5 - < 10
Distillates (petroleum), hydrotreated light	64742-47-8	>= 1 - < 5
Petrolium Distillates	64742-96-7	>= 1 - < 5
heptane	142-82-5	>= 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.	<u>).</u>
lf inhaled	: Consult a physician after significant exposure. If unconscious place in recovery position and seek mer advice.	dical
In case of skin contact	 Wash off immediately with plenty of water for at least 1 minutes. If on skin, rinse well with water. If on clothes, remove clothes. 	5
In case of eye contact	 If in eyes, rinse with water for 15 minutes. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. 	
If swallowed	 Keep respiratory tract clear. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious persol If symptoms persist, call a physician. 	

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	Cart	hol-resistant foam oon dioxide (CO2) chemical
Unsuitable extinguishing media	: High	volume water jet
Specific hazards during firefighting	: Do r cour	not allow run-off from fire fighting to enter drains or water ses.
Hazardous combustion products		oon dioxide (CO2) oon monoxide oke
Specific extinguishing methods	:	
		extinguishing measures that are appropriate to local unstances and the surrounding environment.



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Further information	: Collect contaminated fire extinguis must not be discharged into drains Fire residues and contaminated fir be disposed of in accordance with For safety reasons in case of fire, separately in closed containments Use a water spray to cool fully closed	s. re extinguishing water must local regulations. cans should be stored
Special protective equipment for firefighters	: Wear self-contained breathing app necessary.	paratus for firefighting if

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	:	Sweep up or vacuum up spillage and collect in suitable container for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	 Do not breathe vapours or spray mist. 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. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Container may be opened only under exhaust ventilation hood. Open drum carefully as content may be under pressure. 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.



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	Containers which are opened muskept upright to prevent leakage. Observe label precautions. Electrical installations / working mathe technological safety standards	aterials must comply with
Materials to avoid	: Oxidizing agents	

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
butane	106-97-8	TWA	800 ppm 1,900 mg/m3	NIOSH REL
		TWA	800 ppm 1,900 mg/m3	OSHA P0
acetone	67-64-1	TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH
		TWA	250 ppm 590 mg/m3	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m3	OSHA Z-1
		TWA	750 ppm 1,800 mg/m3	OSHA P0
		STEL	1,000 ppm 2,400 mg/m3	OSHA P0
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m3	OSHA P0
Distillates (petroleum), hydrotreated light	64742-47-8	TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA P0
heptane	142-82-5	TWA	85 ppm 350 mg/m3	NIOSH REL
		С	440 ppm 1,800 mg/m3	NIOSH REL
		TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA P0
		STEL	500 ppm 2,000 mg/m3	OSHA P0

Components with workplace control parameters

Biological occupational exposure limits

Component	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	



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2-PROPANONE	67-64-1	Acetone	Urine	End of	50 mg/l	ACGIH BEI
				shift (As	Ŭ	
				soon as		
				possible		
				after		
				exposure		
				ceases)		

Personal protective equipme		
Respiratory protection	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstration that exposures are within recommended exposure guided	rates
Hand protection		
Remarks	The suitability for a specific workplace should be discuss with the producers of the protective gloves.	ed
Eye protection	Ensure that eyewash stations and safety showers are clo the workstation location. Tightly fitting safety goggles Wear face-shield and protective suit for abnormal proces problems.	
Skin and body protection	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work pla	ace.
Hygiene measures	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday. Do not breathe dust or spray mist.	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Aerosol containing a liquefied gas
Colour	:	red
Odour	:	solvent-like
Odour Threshold	:	not determined
рН	:	Not applicable
Melting point/freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Extremely flammable aerosol.
Upper explosion limit	:	No data available



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Lower explosion limit	: No data available	
Vapour pressure	: 1,723 - 3,171 hPa (21 °C)	
Relative vapour density	: No data available	
Density	: No data available	
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	: 42.65 kJ/g	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
reactions	Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components:

butane:

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



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acetone:		
Acute oral toxicity	: LD50 Rat: 5,800 mg/kg	
Acute inhalation toxicity	: LC50 Rat: 132 mg/l Exposure time: 3 h	
1	LC50 Rat: 50.1 mg/l	
Acute dermal toxicity	: LD50 Guinea pig: > 7,426 mg/kg	
	LD50 Rabbit: > 7,426 mg/kg	
propane:		
Acute inhalation toxicity	: LC50 Mouse: 1,237 mg/l Exposure time: 2 h	
	LC50 Rat: 658 mg/l Exposure time: 4 h	
	LC50 Rat: 1,355 mg/l	
Distillates (petroleum), hyd	rotreated light:	
Acute oral toxicity		
Acute inhalation toxicity	: LC50 Rat: > 4.6 mg/l Exposure time: 6 h	
Acute dermal toxicity	: LD50 Rat: > 2,000 mg/kg	
heptane:		
Acute inhalation toxicity	: LC50 Rat: 103,000 mg/l Exposure time: 4 h	

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Severe eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity



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No data available

Reproductive toxicity

No data available

Distillates (petroleum), hydrotreated heavy paraffinic: Naphtha (petroleum), hydrotreated light: butane: acetone: propane: Distillates (petroleum), hydrotreated light: Petrolium Distillates: heptane:

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.

<u>Components:</u> Distillates (petroleum), hydrotreated light: Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available Bioaccumulative potential

Product:	
Partition coefficient: n- octanol/water <u>Components:</u> butane :	: Remarks: No data available
Partition coefficient: n- octanol/water	: Pow: 2.89
heptane :	



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Partition coefficient: n- : octanol/water	log Pow: > 3.0 log Pow: 5	
Mobility in soil		
No data available		
Other adverse effects		
No data available Product:		
Regulation Remarks	40 CFR Protection of Environment; Stratospheric Ozone - CAA Section Substances This product neither contains, nor w with a Class I or Class II ODS as de Clean Air Act Section 602 (40 CFR + + B).	602 Class I ras manufactured fined by the U.S.
Additional ecological : information	An environmental hazard cannot be event of unprofessional handling or aquatic life.	
<u>Components:</u> Distillates (petroleum), hydrotreated light:		
Additional ecological : information	No data available	

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. Send to a licensed waste management company.
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, 2.1, - Limited quantity





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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

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)
acetone	67-64-1	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	:	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	ethylbenzene benzene	WARNING! This product contains a chemical known to the State of California to cause cancer. 100-41-4 71-43-2 WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive
	toluene benzene	harm. 108-88-3 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
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:



ZEP REDI-GREASE AERO

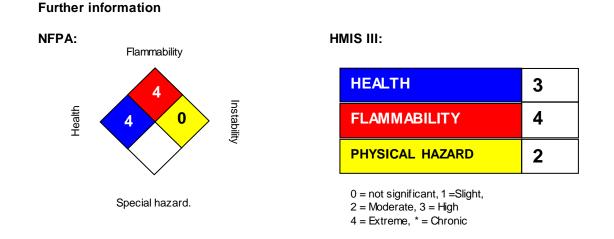
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AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION



OSHA GHS Label Information:		
Hazard pictograms		
Signal w ord	: Danger:	
Hazard statements	 Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. 	
Precautionary statements	: Prevention: Keep aw ay 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. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves. Response: IF ON SKIN: Wash with plenty of soap and w ater. 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 unw ell. IF IN EYES: Rinse cautiously with w ater for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and w ash before reuse. Storage: Store in a w ell-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Disposal: Dispose of contents/container in accordance with local regulation.	

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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.

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