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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	ZEP STOVE AND OVEN CLEANER AERO DZ
Material number	:	0000000000027101
Manufacturer or supplier's o	leta	lils
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

Recommended use of the chemical and restrictions on use

Recommended use : Cleaner

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	light grey
Odour	characteristic

GHS Classification

Gases under pressure	: Liquefied gas
Skin corrosion	: Category 1
Serious eye damage	: Category 1

GHS label elements

Hazard pictograms

Hazard statements

Signal	word	



:	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.
	Response:



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	P301 + P330 + P331 IF SWALLO induce vomiting.	WED: Rinse mouth. Do NOT
	P303 + P361 + P353 IF ON SKIN immediately all contaminated cloth water/shower.	, ,
	P304 + P340 + P310 IF INHALED: Remove person to fres and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiousl water for several minutes. Remove contact lenses, if prese and easy to do. Continue rinsing. Immediately call a POIS CENTER/doctor.	
	P363 Wash contaminated clothing Storage:	g before reuse.
	P405 Store locked up. P410 + P403 Protect from sunligh place.	t. Store in a well-ventilated
	Disposal: Dispose of contents/container in a regulation.	accordance with local

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
propane-1,2-diol	57-55-6	>= 5 - < 10
butane	106-97-8	>= 1 - < 5
potassium hydroxide	1310-58-3	>= 1 - < 5
2-butoxyethanol	111-76-2	>= 1 - < 5
propane	74-98-6	>= 1 - < 5

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

SECTION 4. FIRST AID MEASURES

General advice	 Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. 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	 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	 Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.



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	Continue rinsing eyes during trans Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a s	
If swallowed	 Keep respiratory tract clear. Never give anything by mouth to a DO NOT induce vomiting unless d physician or poison control center. If symptoms persist, call a physicia Take victim immediately to hospita 	irected to do so by a an.
Most important symptoms and effects, both acute and delayed	 Effects are immediate and delayed Symptoms may include blistering, Effects are dependent on exposure contact time). Causes severe skin burns and eye Causes serious eye damage. Review section 2 of SDS to see all 	irritation, burns, and pain. e (dose, concentration, e damage.
Notes to physician	: Treat symptomatically. Symptoms	s may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	Carbon dioxide (CO2) Water spray jet Alcohol-resistant foam Dry chemical	
Unsuitable extinguishing media	High volume water jet	
Specific hazards during firefighting	Do not allow run-off from fire fighting to enter drains of courses.	or water
Hazardous combustion products	Carbon dioxide (CO2) Carbon monoxide Smoke Nitrogen oxides (NOx)	
Specific extinguishing methods	Use extinguishing measures that are appropriate to lo circumstances and the surrounding environment.	ocal
Further information	For safety reasons in case of fire, cans should be sto separately in closed containments. Use a water spray to cool fully closed containers.	red
Special protective equipment for firefighters	Wear self-contained breathing apparatus for firefightin necessary.	ng if

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions,

: Use personal protective equipment.



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protective equipment and emergency procedures	Remove all sources of ignition. Ensure adequate ventilation. Evacuate personnel to safe areas. Beware of vapours accumulating to concentrations. Vapours can accum	
Environmental precautions	: Prevent product from entering drain Prevent further leakage or spillage If the product contaminates rivers a respective authorities.	if safe to do so.
Methods and materials for containment and cleaning up	: Neutralise with acid.	

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 container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	: Oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propane-1,2-diol	57-55-6	TWA	10 mg/m3	US WEEL
butane	106-97-8	TWA	800 ppm 1,900 mg/m3	NIOSH REL
		TWA	800 ppm 1,900 mg/m3	OSHA P0
		PEL	800 ppm	CAL PEL



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			1,900 mg/m3	
potassium hydroxide	1310-58-3	С	2 mg/m3	ACGIH
		С	2 mg/m3	NIOSH REL
		С	2 mg/m3	OSHA P0
		С	2 mg/m3	CAL PEL
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m3	NIOSH REL
		TWA	50 ppm 240 mg/m3	OSHA Z-1
		TWA	25 ppm 120 mg/m3	OSHA P0
		PEL	20 ppm 97 mg/m3	CAL PEL
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
		PEL	1,000 ppm 1,800 mg/m3	CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
2-BUTOXYE THANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after	200.mg/g Creatinine	ACGIH BEI
				exposure		
				ceases)		

Engineering measures	: effective ventilation in all processing areas
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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		
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. Safety glasses
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.



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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 liquefied gas
Colour	:	light grey
Odour	:	characteristic
Odour Threshold	:	No data available
рН	:	13 - 14
Melting point/freezing point	:	No data available
Boiling point	:	100 °C
Flash point	:	Not applicable
Evaporation rate	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	not determined
Relative vapour density	:	No data available
Density	:	1.43 g/cm3
Solubility(ies)		
Water solubility	:	soluble in cold water, soluble in hot water
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	: 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

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Hazardous decomposition : Carbon oxides products

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition Symptoms of Overexposure	 None known. Effects are immediate and delayed. Symptoms may include blistering, irritation, burns, and pain. 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		
OSHA	human carcinogen by IARC. 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	carcinogen by OSHA. 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 : 2,959 mg/kg Method: Calculation method		
Acute inhalation toxicity	: Acute toxicity estimate : 57.75 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:			
butane: Acute inhalation toxicity	: LC50 Mouse: 1,237 mg/l Exposure time: 2 h		
	LC50 Rat: 1,355 mg/l		
propane: Acute inhalation toxicity	: LC50 Mouse: 1,237 mg/l Exposure time: 2 h		



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LC50 Rat: 658 mg/l Exposure time: 4 h

LC50 Rat: 1,355 mg/l

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

propane-1,2-diol: butane: potassium hydroxide: 2-butoxyethanol: propane:

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION



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Ecotoxicity		
No data available		
Persistence and degradability		
No data available Bioaccumulative potential		
Product:		
Partition coefficient: n- octanol/water <u>Components:</u> propane-1,2-diol :	: Remarks: No data available	
Partition coefficient: n- octanol/water butane :	: log Pow: -1.07	
Partition coefficient: n- octanol/water	: Pow: 2.89	
Mobility in soil		
No data available		
Other adverse effects		
No data available <u>Product:</u>		
Regulation	40 CFR Protection of Environmer Stratospheric Ozone - CAA Secti Substances	-
Remarks	This product neither contains, nor with a Class I or Class II ODS as Clean Air Act Section 602 (40 CF + B).	defined by the U.S.
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. 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.



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SECTION 14. TRANSPORT INFORMATION

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

Transportation Regulation: IMDG (Vessel): UN1950, AEROSOLS, 2.2, - Limited quantity

Transportation Regulation: IATA (Cargo Air): UN1950, AEROSOLS, 2.2, - Limited quantity

Transportation Regulation: IATA (Passenger Air): UN1950, AEROSOLS, 2.2, - Limited quantity

Transportation Regulation: TDG (Canada): UN1950, AEROSOLS, 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.

 No substances are subject to TSCA 12(b) export notification requirements.

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
potassium hydroxide	1310-58-3	1000	*

*: 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 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.

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California Prop 6	5 This product does not contain any ch California to cause cancer, birth defeo reproductive harm.	
The components	of this product are reported in the following inve	entories:
TSCA DSL	On TSCA Inventory This product contains one or more componen Canadian NDSL. All other components are o	

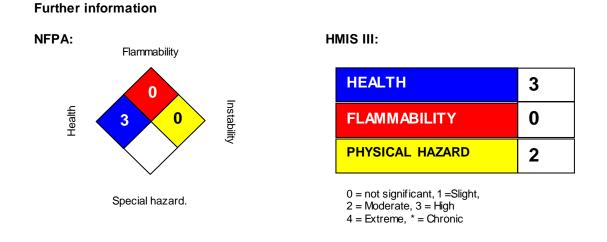
Zepinc

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



OSHA - GHS Label Information:

Hazard pictograms	
Signal w ord	: 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. Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with w ater/shower. 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. Stor age: Store locked up. Protect from sunlight. Store in a w ell-ventilated place. Disposal: Dispose of contents/container in accordance with local regulation.

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