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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION		
Material name	: A07240 ZEP OVN&GRL ZUOVGF	R19 20N19STKOBS

Material Hame	·	
Material number	:	0000000001045440
Manufacturer or supplier's o	deta	ails
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 : Cleaner

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	light grey
Odour	characteristic

GHS Classification

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



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	Response: P301 + P330 + P331 IF SWALLO induce vomiting. P303 + P361 + P353 IF ON SKIN immediately all contaminated clor water/shower. P304 + P340 + P310 IF INHALEI and keep comfortable for breathin POISON CENTER/doctor. P305 + P351 + P338 + P310 IF I water for several minutes. Remov and easy to do. Continue rinsing. CENTER/doctor. P363 Wash contaminated clothin Storage: P410 Protect from sunlight. P412 Do not expose to temperate Disposal: P501 Dispose of contents/contain regulation.	N (or hair): Take off thing. Rinse skin with D: Remove person to fresh air ng. Immediately call a N EYES: Rinse cautiously with ve contact lenses, if present . Immediately call a POISON ng before reuse. ures exceeding 50 °C/ 122 °F.

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	>= 3 - < 5
potassium hydroxide	1310-58-3	>= 1 - < 3
2-butoxyethanol	111-76-2	>= 1 - < 3
propane	74-98-6	>= 1 - < 3

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



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	tissue damage and blindness. Continue rinsing eyes during tran Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing If eye irritation persists, consult a Rinse immediately with plenty of	j. specialist.
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to DO NOT induce vomiting unless physician or poison control cente If symptoms persist, call a physic Take victim immediately to hospit	directed to do so by a r. ian.
Most important symptoms and effects, both acute and delayed	 Effects are immediate and delaye Symptoms may include blistering Effects are dependent on exposu contact time). Causes severe skin burns and ey Review section 2 of SDS to see a 	, irritation, burns, and pain. re (dose, concentration, /e damage.
Notes to physician	: Treat symptomatically. Symptom	is 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 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	:	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,

: 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.	
Environmental precautions	: Prevent product from entering drains Prevent further leakage or spillage if If the product contaminates rivers an respective authorities.	safe to do so.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent materia hazardous waste.	l and dispose of as

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Do not breathe vapours/dust. 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. Dispose of rinse water in accordance with local and national regulations.
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 1,900 mg/m3	CAL PEL
potassium hydroxide	1310-58-3	С	2 mg/m3	ACGIH
		С	2 mg/m3	NIOSH REL



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		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-BUTOXYETHANOL	111-76-2	Butoxyacetic	Urine	End of	200.mg/g	ACGIH BEI
		acid (BAA)		shift (As	Creatinine	
				soon as		
				possible		
				after		
				exposure		
				ceases)		

Engineering measures	:	effective ventilation in all processing areas
Personal protective equipment	nt	
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	:	Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water. 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. When using do not smoke.



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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	: None known.
Symptoms of Overexposure	: 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
ACGIH	human carcinogen by IARC. Confirmed animal carcinogen with unknown relevance to humans
OSHA	2-butoxyethanol 111-76-2 No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
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 : 3,170 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:	
2-butoxyethanol: Acute oral toxicity	: LD50 Oral Rat: 880 mg/kg
Acute dermal toxicity	: LD50 Dermal Rabbit: 1,060 mg/kg
Skin corrosion/irritation	

Skin corrosion/irritation



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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

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

Ecotoxicity

No data available

Persistence and degradability

No data available Bioaccumulative potential

Product:

Partition coefficient: n- : Remarks: No data available octanol/water <u>Components:</u> propane-1,2-diol :



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Partition coefficient: n- octanol/water butane : Partition coefficient: n-	: log Pow: -1.07 : Pow: 2.89	
octanol/water		
Mobility in soil		
No data available		
Other adverse effects		
No data available <u>Product:</u>		
Regulation	40 CFR Protection of Environme Stratospheric Ozone - CAA Sec Substances	,
Remarks	This product neither contains, n with a Class I or Class II ODS a Clean Air Act Section 602 (40 C + B).	s 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. 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

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

Transportation Regulation: IMDG (Vessel): UN1950, AEROSOLS, NON-FLAMMABLE, CORROSIVE, 2.2, (8), - Limited quantity

Transportation Regulation: IATA (Cargo Air): UN1950, Aerosols, non-flammable, containing substances in Class 8, Packing Group III, 2.2, (8), -Limited quantity



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Transportation Regulation: IATA (Passenger Air): UN1950, Aerosols, non-flammable, containing substances in Class 8, Packing Group III, 2.2, (8), -Limited quantity

Transportation Regulation: TDG (Canada): UN1950, AEROSOLS, NON-FLAMMABLE, CORROSIVE, 2.2, (8), - 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	:	Gases under pressure Skin corrosion or irritation Serious eye damage or eye irritation	I	
SARA 302	:	No chemicals in this material are sul requirements of SARA Title III, Secti		ting
SARA 313	:	The following components are subject to reporting levelsestablished by SARA Title III, Section 313:2-butoxyethanol111-76-22.5973 %		vels 2.5973 %
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.		



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

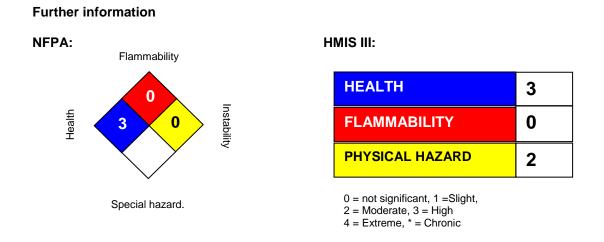
DSLThis product contains one or more components that are listed on the
Canadian NDSL. All other components are on the Canadian DSL.TSCAOn TSCA Inventory

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



OSHA - GHS Label Information:

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. Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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. Storage: 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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