

**A07699 ZC FMG GLS ZUFGC19A 20N19 STK**

Version 2.0

Revision Date 09/24/2015

Print Date 10/14/2015

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : A07699 ZC FMG GLS ZUFGC19A 20N19 STK

Material number : 00000000001046502

**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
Odour	pleasant

**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.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

**Potential Health Effects**
**Carcinogenicity:**

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<b>IARC</b>	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.
<b>ACGIH</b>	Confirmed animal carcinogen with unknown relevance to humans
<b>OSHA</b>	2-butoxyethanol <span style="float: right;">111-76-2</span> 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.
<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.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

## Hazardous components

Chemical Name	CAS-No.	Concentration [%]
ethanol	64-17-5	>= 1 - < 5
butane	106-97-8	>= 1 - < 5
propan-2-ol	67-63-0	>= 1 - < 5

## 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. Consult a physician after significant exposure.
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	: Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Rinse immediately with plenty of water for at least 15 minutes.
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Take victim immediately to hospital.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray jet  
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.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
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.
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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.  
Evacuate personnel to safe areas.  
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 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.
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**SECTION 7. HANDLING AND STORAGE**

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- 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.  
 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.  
 Keep in a dry, cool and well-ventilated place.
- 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
ethanol	64-17-5	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m3	OSHA P0
butane	106-97-8	TWA	800 ppm 1,900 mg/m3	NIOSH REL
		TWA	800 ppm 1,900 mg/m3	OSHA P0
propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1
		TWA	400 ppm 980 mg/m3	OSHA P0
		STEL	500 ppm 1,225 mg/m3	OSHA P0

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2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m <sup>3</sup>	NIOSH REL
		TWA	50 ppm 240 mg/m <sup>3</sup>	OSHA Z-1
		TWA	25 ppm 120 mg/m <sup>3</sup>	OSHA P0

### Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workweek	40 mg/l	ACGIH BEI

### 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 : Wash hands before breaks and at the end of workday.  
When using do not eat, drink or smoke.  
When using do not smoke.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Aerosol containing a liquefied gas
- Colour : colourless
- Odour : pleasant
- Odour Threshold : No data available
- pH : 10 - 11
- Melting point/freezing point : No data available
- Boiling point : No data available
- Flash point :  
No data available

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Evaporation rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.986 g/cm <sup>3</sup>
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
Hazardous decomposition products	: Carbon oxides

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

##### Product:

Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method

##### Components:

##### ethanol:

Acute oral toxicity	: LD50 Oral Rat: 7,060 mg/kg
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Acute inhalation toxicity : LC50 Rat: 124.7 mg/l  
Exposure time: 4 h

**butane:**

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

LC50 Rat: 1,355 mg/l

**propan-2-ol:**

Acute oral toxicity : LD50 Oral Rat: 4,396 mg/kg  
Method: Calculation method

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**ethanol:**

**butane:**

**propan-2-ol:**

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

No data available

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

Remarks: No data available

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**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:****butane :**

Partition coefficient: n-octanol/water : Pow: 2.89

**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

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**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, 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

### 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)
2,2'-iminodiethanol	111-42-2	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

**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 contains a chemical known to the State of California to cause cancer.

2,2'-iminodiethanol

111-42-2

#### 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

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**PICCS** Not in compliance with the inventory  
**IECSC** Not in compliance with the inventory

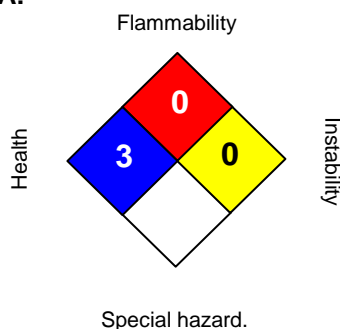
### Inventory Acronym and Validity Area Legend:

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

## SECTION 16. OTHER INFORMATION

### Further information

#### NFPA:



#### HMIS III:

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>2</b>

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

### OSHA GHS Label Information:

Hazard pictograms :



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.  
**Disposal:** Dispose of contents/ container to an approved waste disposal plant.

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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

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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.