

A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A07699 ZC FOAMING 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

Recommended use of the chemical and restrictions on use

Recommended use : Glass Cleaner

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 elements

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.

A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

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 |

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

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.
- Most important symptoms and effects, both acute and delayed : Effects may be delayed, symptoms may include minor eye or skin irritation.
Overexposure may cause mild eye or skin irritation.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray jet
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

| | |
|---|---|
| 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 ₂) 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. |

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. |

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. |
|-------------------------|---|

A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

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 |
| | | STEL | 1,000 ppm | ACGIH |
| | | PEL | 1,000 ppm 1,900 mg/m3 | CAL PEL |
| 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 |
| 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 |
| | | PEL | 400 ppm 980 mg/m3 | CAL PEL |
| | | STEL | 500 ppm | CAL PEL |

A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

| | | | | |
|--|--|--|-------------|--|
| | | | 1,225 mg/m3 | |
|--|--|--|-------------|--|

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 |

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
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle 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 : 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

Evaporation rate : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

| | |
|--|---|
| Vapour pressure | : No data available |
| Relative vapour density | : No data available |
| Density | : 0.986 g/cm ³ |
| 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**Potential Health Effects**

| | |
|------------------------------|--|
| Aggravated Medical Condition | : None known. |
| Symptoms of Overexposure | : Effects may be delayed, symptoms may include minor eye or skin irritation. |

Carcinogenicity:

| | |
|-------------|---|
| IARC | 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. |
| OSHA | 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 | No component of this product present at levels greater than or |

A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

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

Components:

ethanol:

Acute oral toxicity : LD50 Oral Rat: 7,060 mg/kg

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

SAFETY DATA SHEET



A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

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-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

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.

SAFETY DATA SHEET



A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

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

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

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

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.

SAFETY DATA SHEET



A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

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 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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

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

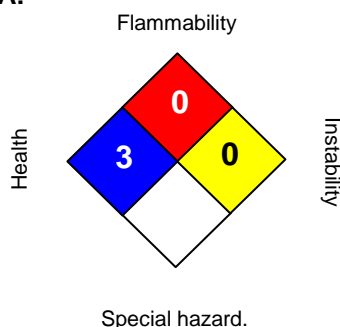
Inventory Acronym and Validity Area Legend:

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

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

| | |
|------------------------|----------|
| HEALTH | 3 |
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 2 |

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.

| | |
|----------|-----|
| Version: | 3.1 |
|----------|-----|

SAFETY DATA SHEET



A07699 ZC FOAMING GLS ZUFGC19A 20N19 STK

Version 3.1

Revision Date 12/14/2016

Print Date 05/22/2018

| | |
|----------------|------------|
| Revision Date: | 12/14/2016 |
| Print Date: | 05/22/2018 |

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it 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.

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.