

# SAFETY DATA SHEET

## ZEP 50 HEAVY DUTY FOAMING DEGREASER 20N16 12CT

Version 4.1

Revision Date 10/01/2023

Print Date 03/14/2024

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP 50 HEAVY DUTY FOAMING DEGREASER 20N16  
12CT

Material number : 000000000000361301

#### Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE  
Emerson, GA 30137

Telephone : Compliance Services - 877-428-9937

#### Emergency telephone numbers

**For SDS Information** : Compliance Services - 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

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	amber
Odour	characteristic

#### GHS Classification

Flammable aerosols : Category 1  
Gases under pressure : Liquefied gas  
Skin corrosion : Category 1  
Serious eye damage : Category 1  
Skin sensitisation : Category 1  
Carcinogenicity : Category 2

#### GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.  
H280 Contains gas under pressure; may explode if heated.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.

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H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

Precautionary statements

: **Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

**Storage:**

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

**Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical name	CAS-No.	Concentration [%]
sodium dodecylbenzenesulfonate	25155-30-0	>= 5 - < 10
2-(2-butoxyethoxy)ethanol	112-34-5	>= 3 - < 5
d-limonene	5989-27-5	>= 3 - < 5
propane	74-98-6	>= 1 - < 3
butane	106-97-8	>= 1 - < 3
Amides, coco, N,N-bis(hydroxyethyl)	68603-42-9	>= 1 - < 3
tetrapotassium pyrophosphate	7320-34-5	>= 1 - < 3
Sulfonic acids, C14-16-alkane hydroxy and C14-	68439-57-6	>= 1 - < 3

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16-alkene, sodium salts		
benzyl alcohol	100-51-6	>= 1 - < 3
2,2'-iminodiethanol	111-42-2	>= 0.1 - < 1

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

### 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.  
Get medical attention immediately.
- 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.  
Remove contaminated clothing and shoes.  
Wash off immediately with plenty of water for at least 15 minutes.  
Wash contaminated clothing before re-use.
- 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, also under the eyelids, 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 : Chronic effects are delayed and symptoms may not be observed during an exposure.  
Effects are dependent on exposure (dose, concentration, contact time).  
Effects are immediate and delayed.  
Symptoms may include irritation, redness, pain, and rash.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
Review section 2 of SDS to see all potential hazards.  
Causes skin irritation.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical

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	Water spray jet
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 Sulphur oxides Smoke
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	: 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 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	: 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

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. Take precautionary measures against static discharges.
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Provide sufficient air exchange and/or exhaust in work rooms.  
Always replace cap after use.

Dispose of rinse water in accordance with local and national regulations.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Do not breathe vapours or spray mist.

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.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Do not freeze.  
Strong 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
2-(2-butoxyethoxy)ethanol	112-34-5	TWA (Inhalable fraction and vapor)	10 ppm	ACGIH
d-limonene	5989-27-5	TWA	30 ppm	US WEEL
propane	74-98-6	TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	OSHA P0
		PEL	1,000 ppm 1,800 mg/m <sup>3</sup>	CAL PEL
butane	106-97-8	TWA	800 ppm 1,900 mg/m <sup>3</sup>	NIOSH REL
		TWA	800 ppm 1,900 mg/m <sup>3</sup>	OSHA P0
		PEL	800 ppm 1,900 mg/m <sup>3</sup>	CAL PEL
		STEL	1,000 ppm	ACGIH
benzyl alcohol	100-51-6	TWA	10 ppm	US WEEL
2,2'-iminodiethanol	111-42-2	TWA (Inhalable fraction and vapor)	1 mg/m <sup>3</sup>	ACGIH

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		TWA	3 ppm 15 mg/m <sup>3</sup>	NIOSH REL
		TWA	3 ppm 15 mg/m <sup>3</sup>	OSHA P0
		PEL	0.46 ppm 2 mg/m <sup>3</sup>	CAL PEL

**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

Material : Protective gloves

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

Eye protection

: Tightly fitting safety goggles  
Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.

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.  
Wash hands before breaks and at the end of workday.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Aerosol containing a liquefied gas

Colour : amber

Odour : characteristic

Odour Threshold : No data available

pH : 11.5

Melting point/freezing point : Not applicable

Boiling point : No data available

Flash point :  
Not applicable

Evaporation rate : No data available

Flammability (solid, gas, liquid) : Extremely flammable aerosol.

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Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.012 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: partly soluble
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	: > 30 kJ/g

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### SECTION 10. STABILITY AND REACTIVITY

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

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### SECTION 11. TOXICOLOGICAL INFORMATION

#### Potential Health Effects

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Chronic effects are delayed and symptoms may not be observed during an exposure. Effects are dependent on exposure (dose, concentration,

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contact time).  
Effects are immediate and delayed.  
Symptoms may include irritation, redness, pain, and rash.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
Review section 2 of SDS to see all potential hazards.  
Causes skin irritation.  
Treat symptomatically. Symptoms may be delayed.

### Carcinogenicity:

<b>IARC</b>	Group 2B: Possibly carcinogenic to humans	
	Amides, coco, N,N-bis(hydroxyethyl) 2,2'-iminodiethanol	68603-42-9
<b>ACGIH</b>	Confirmed animal carcinogen with unknown relevance to humans	111-42-2
	2,2'-iminodiethanol	111-42-2
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.	
<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.	

### Acute toxicity

#### Product:

Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : 149.9 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method

#### Components:

##### **sodium dodecylbenzenesulfonate:**

Acute oral toxicity : LD50 Oral Rat: 438 mg/kg

##### **d-limonene:**

Acute oral toxicity : LD50 Oral Rat: 4,400 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: > 5,000 mg/kg

##### **benzyl alcohol:**

Acute dermal toxicity : LD50 Rabbit: 1,250 mg/kg

### Skin corrosion/irritation

#### Product:

Remarks: Irritating to skin.

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### Serious eye damage/eye irritation

**Product:**

Remarks: Irritating to eyes.

### Respiratory or skin sensitisation

**Product:**

Remarks: Causes sensitisation.

**Components:**

**d-limonene:**

Classification: May cause sensitisation by skin contact.

### 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

**Components:**

**Amides, coco, N,N-bis(hydroxyethyl):**

Remarks: No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

No data available

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### Persistence and degradability

No data available

### Bioaccumulative potential

#### Product:

Partition coefficient: n-octanol/water : Remarks: No data available

#### Components:

##### **2-(2-butoxyethoxy)ethanol :**

Partition coefficient: n-octanol/water : Pow: 1

##### **d-limonene :**

Partition coefficient: n-octanol/water : log Pow: 4.232

##### **butane :**

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

##### **Amides, coco, N,N-bis(hydroxyethyl) :**

Partition coefficient: n-octanol/water : Remarks: No data available

##### **benzyl alcohol :**

Partition coefficient: n-octanol/water : log Pow: 1.05 (20 °C)

##### **2,2'-iminodiethanol :**

Partition coefficient: n-octanol/water : Pow: 1.43

### 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 : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life.  
The GHS H401 statement "Toxic to aquatic life" noted above is an Acute Aquatic Toxicity Category 2 classification. Although the product has the potential to harm the environment, it is not classified as a marine pollutant or regulated under transportation regulations.

#### Components:

##### **Amides, coco, N,N-bis(hydroxyethyl) :**

Additional ecological : No data available

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information

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### 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.  
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.

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### SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):  
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: IMDG (Vessel):  
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

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

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.

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### 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**

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### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium dodecylbenzenesulfonate	25155-30-0	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
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**SARA 311/312 Hazards** : Flammable (gases, aerosols, liquids, or solids)  
Gases under pressure  
Carcinogenicity  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Respiratory or skin sensitisation

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

2-(2-butoxyethoxy)ethanol	112-34-5	4.9286 %
2-butoxyethanol	111-76-2	0.0751 %

### California Prop. 65



WARNING: This product can expose you to chemicals including Amides, coco, N,N-bis(hydroxyethyl), 2,2'-iminodiethanol, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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

**DSL** All components of this product are on the Canadian DSL  
**TSCA** On 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

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### Further information

#### NFPA:

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>4</b>
<b>INSTABILITY</b>	<b>0</b>
<b>SPECIAL HAZARD.</b>	

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

#### HMIS III:

<b>HEALTH</b>	<b>3*</b>
<b>FLAMMABILITY</b>	<b>4</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 :

Hazard statements :

Precautionary statements :

**Danger:**

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer.

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away 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. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:** IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/ attention. If skin

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irritation or rash occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash 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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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.