

## Enforcer(R) Bed Bug & Flea Fogger

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : Enforcer(R) Bed Bug &amp; Flea Fogger

EPA ID Number: 1021-1674-40849

Material number : 00000000001047964

#### Manufacturer or supplier's details

Company : Zep Commercial Sales &amp; Service, a unit of Zep, Inc.

Address : 1310 Seaboard Industrial Blvd., NW  
Atlanta, GA 30318

Telephone : 404-352-1680

#### Emergency telephone numbers

|                                       |                                                                                            |
|---------------------------------------|--------------------------------------------------------------------------------------------|
| <b>For SDS Information</b>            | : Compliance Services 1-877-428-9937                                                       |
| <b>For a Medical Emergency</b>        | : 877-541-2016 Toll Free - All Calls Recorded                                              |
| <b>For a Transportation Emergency</b> | : CHEMTREC: 800-424-9300 - All Calls Recorded.<br>In the District of Columbia 202-483-7616 |

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

|            |                                    |
|------------|------------------------------------|
| Appearance | Aerosol containing a liquefied gas |
| Colour     | milky, white                       |
| Odour      | solvent-like                       |

#### GHS Classification

Flammable aerosols : Category 2  
 Gases under pressure : Liquefied gas  
 Respiratory sensitisation : Category 1

#### GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H223 Flammable aerosol.  
 H280 Contains gas under pressure; may explode if heated.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements : **Prevention:**  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P211 Do not spray on an open flame or other ignition source.

## Enforcer(R) Bed Bug & Flea Fogger

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

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

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P285 In case of inadequate ventilation wear respiratory protection.

**Response:**

P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

**Storage:**

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

P405 Store locked up.

**Disposal:**

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

### Potential Health Effects

#### 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.

**ACGIH**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**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 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 [%] |
|-----------------------------------------------------------------------------------------|------------|-------------------|
| propane                                                                                 | 74-98-6    | >= 10 - < 20      |
| butane                                                                                  | 106-97-8   | >= 10 - < 20      |
| Distillates (petroleum), hydrotreated light                                             | 64742-47-8 | >= 5 - < 10       |
| N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide                              | 113-48-4   | >= 0.1 - < 1      |
| 2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether                                         | 51-03-6    | >= 0.1 - < 1      |
| 4-Chloro-a-(1-methylethyl)benzeneacetic acid, [S-(R*,R*)]-Cyano-(3-phenoxyphenyl)methyl | 66230-04-4 | >= 0.1 - < 1      |

### SECTION 4. FIRST AID MEASURES

**Enforcer(R) Bed Bug & Flea Fogger**

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

- 
- |                         |                                                                                                                                                                                                                                                                         |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General advice          | : Move out of dangerous area.<br>Show this safety data sheet to the doctor in attendance.<br>Do not leave the victim unattended.                                                                                                                                        |
| If inhaled              | : Call a physician or poison control centre immediately.<br>If unconscious place in recovery position and seek medical advice.                                                                                                                                          |
| In case of skin contact | : Wash off immediately with plenty of water for at least 15 minutes.<br>If on clothes, remove clothes.<br>If skin irritation persists, call a physician.                                                                                                                |
| In case of eye contact  | : If in eyes, rinse with water for 15 minutes.<br>Remove contact lenses.<br>Protect unharmed eye.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist.                                                                             |
| If swallowed            | : Keep respiratory tract clear.<br>DO NOT induce vomiting unless directed to do so by a physician or poison control center.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.<br>Take victim immediately to hospital. |

---

**SECTION 5. FIREFIGHTING MEASURES**

- |                                               |                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media                  | : Alcohol-resistant foam<br>Carbon dioxide (CO <sub>2</sub> )<br>Dry chemical<br>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> )<br>Carbon monoxide<br>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.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.<br>For safety reasons in case of fire, cans should be stored separately in closed containments.<br>Use a water spray to cool fully closed containers. |
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus for firefighting if necessary.                                                                                                                                                                                                                                                                                                        |

**Enforcer(R) Bed Bug & Flea Fogger**

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

---

**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.
- 

**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Do not breathe vapours or spray mist.  
Avoid exposure - obtain special instructions before use.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
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.  
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.  
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 in a dry, cool and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Oxidizing agents
-

## Enforcer(R) Bed Bug & Flea Fogger

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

| Components                                     | CAS-No.    | Value type<br>(Form of exposure) | Control parameters /<br>Permissible concentration | Basis     |
|------------------------------------------------|------------|----------------------------------|---------------------------------------------------|-----------|
| propane                                        | 74-98-6    | TWA                              | 1,000 ppm                                         | ACGIH     |
|                                                |            |                                  | 1,000 ppm<br>1,800 mg/m <sup>3</sup>              | NIOSH REL |
|                                                |            | TWA                              | 1,000 ppm<br>1,800 mg/m <sup>3</sup>              | OSHA Z-1  |
|                                                |            | TWA                              | 1,000 ppm<br>1,800 mg/m <sup>3</sup>              | OSHA P0   |
|                                                |            |                                  | 800 ppm<br>1,900 mg/m <sup>3</sup>                | NIOSH REL |
| butane                                         | 106-97-8   | TWA                              | 800 ppm<br>1,900 mg/m <sup>3</sup>                | OSHA P0   |
|                                                |            |                                  | 800 ppm<br>1,900 mg/m <sup>3</sup>                | OSHA P0   |
| Distillates (petroleum),<br>hydrotreated light | 64742-47-8 | TWA                              | 500 ppm<br>2,000 mg/m <sup>3</sup>                | OSHA Z-1  |
|                                                |            |                                  | 400 ppm<br>1,600 mg/m <sup>3</sup>                | OSHA P0   |

#### Personal protective equipment

- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- 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.  
Tightly fitting safety goggles
- 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 smoke.  
When using do not eat or drink.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Aerosol containing a liquefied gas
- Colour : milky, white
- Odour : solvent-like

**Enforcer(R) Bed Bug & Flea Fogger**

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

---

|                                        |                           |
|----------------------------------------|---------------------------|
| Odour Threshold                        | : no data available       |
| pH                                     | : 6.8 - 7.3               |
| Melting point/freezing point           | : not determined          |
| Boiling point                          | : not determined          |
| Flash point                            | :<br>no data available    |
| Evaporation rate                       | : not determined          |
| Upper explosion limit                  | : no data available       |
| Lower explosion limit                  | : no data available       |
| Vapour pressure                        | : not determined          |
| Relative vapour density                | : no data available       |
| Density                                | : 0.961 g/cm <sup>3</sup> |
| Solubility(ies)                        |                           |
| Water solubility                       | : insoluble               |
| Solubility in other solvents           | : not determined          |
| 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 | : Vapours may form explosive mixture with air.<br>No decomposition if stored and applied as directed. |
| Conditions to avoid                | : Heat, flames and sparks.<br>Extremes of temperature and direct sunlight.                            |
| Incompatible materials             | : Oxidizing agents                                                                                    |
| Hazardous decomposition products   | : Carbon oxides<br>Hydrogen cyanide (hydrocyanic acid)                                                |

---

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Enforcer(R) Bed Bug & Flea Fogger**

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

**Acute toxicity****Product:**

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

Acute inhalation toxicity : Acute toxicity estimate : > 10 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:****propane:**

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

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

LC50 rat: 1,355 mg/l

**butane:**

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

LC50 rat: 1,355 mg/l

**Distillates (petroleum), hydrotreated light:**

Acute oral toxicity : LD50 rat: > 5,000 mg/kg

Acute inhalation toxicity : LC50 rat: > 4.6 mg/l  
Exposure time: 6 h

Acute dermal toxicity : LD50 rat: > 2,000 mg/kg

**N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide:**

Acute oral toxicity : LD50 Oral rat: 2,800 mg/kg

Acute dermal toxicity : LD50 Dermal rabbit: 470 mg/kg

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation****Product:**

**Enforcer(R) Bed Bug & Flea Fogger**

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**propane:****butane:****Distillates (petroleum), hydrotreated light:****N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide:****2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether:****4-Chloro-a-(1-methylethyl)benzeneacetic acid, [S-(R\*,R\*)]-Cyano-(3-phenoxyphenyl)methyl:****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:****Distillates (petroleum), hydrotreated light:**

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

## Enforcer(R) Bed Bug & Flea Fogger

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

octanol/water

**Components:****butane :**
 Partition coefficient: n- : Pow: 2.89  
 octanol/water
**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., Harmful to aquatic life.

**Components:****Distillates (petroleum), hydrotreated light :**

Additional ecological information : no data available

---

**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.

---

**SECTION 14. TRANSPORT INFORMATION**

|                                                                       |
|-----------------------------------------------------------------------|
| Transportation Regulation: 49 CFR (USA):<br>ORM-D, CONSUMER COMMODITY |
|-----------------------------------------------------------------------|

|                                           |
|-------------------------------------------|
| Transportation Regulation: IMDG (Vessel): |
|-------------------------------------------|

# SAFETY DATA SHEET



## Enforcer(R) Bed Bug & Flea Fogger

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

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

### SECTION 15. REGULATORY INFORMATION

This product is regulated under the United States Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

#### **Pesticide Labeling Information Required Under U.S. FIFRA Regulations**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

#### **CAUTION**

Harmful if absorbed through skin.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### **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** : Fire Hazard  
Sudden Release of Pressure Hazard  
Acute Health Hazard

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

**SARA 313** : 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** This product contains one or several components that are not on the Canadian DSL nor NDSL.

## Enforcer(R) Bed Bug & Flea Fogger

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

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

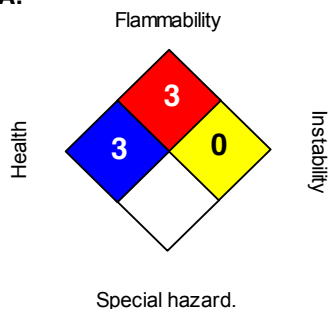
### Inventory Acronym and Validity Area Legend:

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

## SECTION 16. OTHER INFORMATION

### Further information

#### NFPA:



#### HMIS III:

|                        |           |
|------------------------|-----------|
| <b>HEALTH</b>          | <b>3*</b> |
| <b>FLAMMABILITY</b>    | <b>3</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

: **Danger:**

Hazard statements

: Flammable aerosol. Contains gas under pressure; may explode if heated. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements

**Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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. In case of inadequate ventilation wear respiratory protection.  
**Response:** IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.  
**Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up.  
**Disposal:** Dispose of contents/container in accordance with local regulation.

|                |            |
|----------------|------------|
| Version:       | 1.0        |
| Revision Date: | 05/29/2015 |
| Print Date:    | 01/17/2018 |

**Enforcer(R) Bed Bug & Flea Fogger**

Version 1.0

Revision Date 05/29/2015

Print Date 01/17/2018

---

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.