SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

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

EPA ID Number: 1021-1674-40849

Material number: 000000000001047964

Manufacturer or supplier's details
Company: Zep Commercial Sales & Service, a unit of Zep, Inc.
Address: 1310 Seaboard Industrial Blvd., NW
          Atlanta, GA 30318
Telephone: 404-352-1680

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.
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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>propane</td>
<td>74-98-6</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td>butane</td>
<td>106-97-8</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>&gt;= 5 - &lt; 10</td>
</tr>
<tr>
<td>N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide</td>
<td>113-48-4</td>
<td>&gt;= 0.1 - &lt; 1</td>
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<tr>
<td>2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether</td>
<td>51-03-6</td>
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<td>4-Chloro-a-(1-methylethyl)benzenacetic acid, [S-(R*,R*)]-Cyano-(3-phenoxyphenyl)ethyl</td>
<td>66230-04-4</td>
<td>&gt;= 0.1 - &lt; 1</td>
</tr>
</tbody>
</table>

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.

If inhaled

Call a physician or poison control centre immediately.
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.
If on clothes, remove clothes.
If skin irritation persists, call a physician.

In case of eye contact

If in eyes, rinse with water for 15 minutes.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed

Keep respiratory tract clear.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media

Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical
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 (CO2)
Carbon monoxide
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.
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
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
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<tr>
<td>propane</td>
<td>74-98-6</td>
<td>TWA</td>
<td>1,000 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,800 mg/m3</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,800 mg/m3</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,800 mg/m3</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>butane</td>
<td>106-97-8</td>
<td>TWA</td>
<td>800 ppm 1,900 mg/m3</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>800 ppm 1,900 mg/m3</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>TWA</td>
<td>500 ppm 2,000 mg/m3</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>400 ppm 1,600 mg/m3</td>
<td>OSHA P0</td>
</tr>
</tbody>
</table>

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
Odour Threshold: no data available
pH: 6.8 - 7.3
Melting point/freezing point: not determined
Boiling point: not determined
Flash point: 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/cm³
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.
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
Hydrogen cyanide (hydrocyanic acid)

SECTION 11. TOXICOLOGICAL INFORMATION
SAFETY DATA SHEET

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:
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-
Components:

- octanol/water
- 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:

- 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):
ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):
SAFETY DATA SHEET

Enforcer(R) Bed Bug & Flea Fogger

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.
SECTION 16. OTHER INFORMATION

Further information

NFPA:

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Health</th>
<th>Instability</th>
<th>Special hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
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HMIS III:

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>3*</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

OSHA GHS Label Information:

Hazard pictograms:

- Flammable:
- Explosive:
- Poison:

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.
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