

**Enforcer(R) BugMax(R) Flying Insect Killer**

Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : Enforcer(R) BugMax(R) Flying Insect Killer

EPA ID Number: 10807-429-40849

Material number : 000000000001047892

**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****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	off-white
Odour	slight

**GHS Classification**

Gases under pressure : Liquefied gas

Acute toxicity (Oral) : Category 3

**GHS Label element**

Hazard pictograms :



Signal word : Danger

Hazard statements : H280 Contains gas under pressure; may explode if heated.  
H301 Toxic if swallowed.Precautionary statements : **Prevention:**  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
**Response:**  
P301 + P310 + P330 IF SWALLOWED: Immediately call a  
POISON CENTER or doctor/ physician. Rinse mouth.  
**Storage:**

**Enforcer(R) BugMax(R) Flying Insect Killer**

Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

P405 Store locked up.

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

**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 [%]
butane	106-97-8	$\geq 10$ - $< 20$
Distillates (petroleum), hydrotreated light	64742-47-8	$\geq 5$ - $< 10$
propane	74-98-6	$\geq 1$ - $< 5$
N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide	113-48-4	$\geq 1$ - $< 5$
2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether	51-03-6	$\geq 0.1$ - $< 1$
2-methyl-4-oxo-3-(prop-2-ynyl)cyclopent-2-en-1-yl 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate	23031-36-9	$\geq 0.1$ - $< 1$

**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 : Consult a physician after significant exposure.  
If unconscious place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician.  
Wash off immediately with plenty of water for at least 15 minutes.

## Enforcer(R) BugMax(R) Flying Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

- 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  
Foam  
Dry powder  
Carbon dioxide (CO<sub>2</sub>)
- 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  
Nitrogen oxides (NO<sub>x</sub>)
- 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.
- 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.

# Enforcer(R) BugMax(R) Flying Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

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.  
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.  
No smoking.  
Keep in a cool, well-ventilated place.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Store and keep away from, oxidizing agents and acids.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

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

**Enforcer(R) BugMax(R) Flying Insect Killer**

Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

		TWA	1,000 ppm 1,800 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m3	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.  
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 : 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 : off-white
- Odour : slight
- Odour Threshold : no data available
- pH : not applicable
- Melting point/freezing point : no data available
- Boiling point : no data available
- Flash point :  
no data available
- Evaporation rate : no data available
- Flammability (solid, gas) : The product is not flammable.
- Upper explosion limit : no data available
- Lower explosion limit : no data available
- Vapour pressure : no data available
- Relative vapour density : no data available
- Density : no data available
- Solubility(ies)

**Enforcer(R) BugMax(R) Flying Insect Killer**

Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

Water solubility	: dispersible
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	: 13.41 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	: Bases Strong oxidizing agents Strong acids
Hazardous decomposition products	: Carbon dioxide (CO <sub>2</sub> ) Carbon monoxide Nitrogen oxides (NO <sub>x</sub> )

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**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity	: Acute toxicity estimate : 249.65 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

**Enforcer(R) BugMax(R) Flying Insect Killer**

Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

**Components:****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

**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

**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**

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

**butane:****Distillates (petroleum), hydrotreated light:****propane:****N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide:**

**Enforcer(R) BugMax(R) Flying Insect Killer**

Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether:  
2-methyl-4-oxo-3-(prop-2-ynyl)cyclopent-2-en-1-yl 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate:

**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

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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.



# SAFETY DATA SHEET



## Enforcer(R) BugMax(R) Flying Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

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 with long lasting effects.

### 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):  
UN1950, AEROSOLS, 2.2, - Limited quantity

Transportation Regulation: IATA (Cargo Air):  
UN1950, AEROSOLS, 2.2, - Limited quantity

Transportation Regulation: IATA (Passenger Air):  
UN1950, AEROSOLS, 2.2, - Limited quantity

Transportation Regulation: TDG (Canada):  
UN1950, AEROSOLS, 2.2, - 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**

# Enforcer(R) BugMax(R) Flying Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

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 swallowed.

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**

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  
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** 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  
**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**

## SAFETY DATA SHEET



## Enforcer(R) BugMax(R) Flying Insect Killer

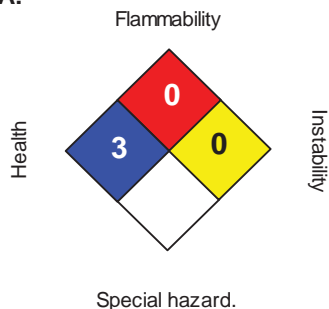
Version 1.0

Revision Date 06/02/2015

Print Date 03/23/2017

## 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

: **Danger:**

Hazard statements

: Contains gas under pressure; may explode if heated. Toxic if sw allowed.

Precautionary statements

**Prevention:** Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product.  
**Response:** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.  
**Storage:** Store locked up. Protect from sunlight. Store in a well-ventilated place.  
**Disposal:** Dispose of contents/container in accordance with local regulation.

Version:	1.0
Revision Date:	06/02/2015
Print Date:	03/23/2017

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