

# SAFETY DATA SHEET

**ZepInc**

## Enforcer Dual Action Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : Enforcer Dual Action Insect Killer

EPA ID Number: 10807-161-40849

Material number : 000000000001047651

**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

#### 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	white
Odour	neutral

#### GHS Classification

Gases under pressure : Liquefied gas

Skin sensitisation : Category 1

#### GHS Label element

Hazard pictograms



Signal word : Warning

Hazard statements : H280 Contains gas under pressure; may explode if heated.  
H317 May cause an allergic skin reaction.

Precautionary statements : **Prevention:**  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves.  
**Response:**  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

# SAFETY DATA SHEET



## Enforcer Dual Action Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

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

P363 Wash contaminated clothing before reuse.

### Storage:

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	>= 10 - < 20
Distillates (petroleum), hydrotreated light	64742-47-8	>= 5 - < 10
propane	74-98-6	>= 1 - < 5
2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether	51-03-6	>= 0.1 - < 1
m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	52645-53-1	>= 0.1 - < 1
Pyrethrins and Pyrethroids	8003-34-7	>= 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 : 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

## SAFETY DATA SHEET

**ZepInc**

### Enforcer Dual Action Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

- 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.

---

#### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray  
Carbon dioxide (CO2)  
Dry powder  
Foam
- 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.
- 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.
- 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 : Sweep up or vacuum up spillage and collect in suitable

## SAFETY DATA SHEET



### Enforcer Dual Action Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

containment and cleaning up container for disposal.  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

#### 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.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Observe label precautions.  
Keep in a dry, cool and well-ventilated place.  
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

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
		TWA	1,000 ppm 1,800 mg/m3	OSHA Z-1
		TWA	1,000 ppm	OSHA P0

## SAFETY DATA SHEET

**ZepInc**

### Enforcer Dual Action Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

1,800 mg/m3

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

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Aerosol containing a liquefied gas

Colour : white

Odour : neutral

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)

Water solubility : slightly soluble

Partition coefficient: n-octanol/water : no data available

## SAFETY DATA SHEET

**ZepInc**

### Enforcer Dual Action Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

Auto-ignition temperature : not determined  
Thermal decomposition : no data available  
Viscosity  
Viscosity, kinematic : no data available  
Heat of combustion : 12.23 kJ/g

---

#### 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.  
Vapours may form explosive mixture with air.  
Conditions to avoid : Heat, flames and sparks.  
Extremes of temperature and direct sunlight.  
Incompatible materials : Strong oxidizing agents  
Hazardous decomposition products : Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide

---

#### SECTION 11. TOXICOLOGICAL INFORMATION

##### 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

###### 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:

## SAFETY DATA SHEET

**ZepInc**

### Enforcer Dual Action Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

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

#### Skin corrosion/irritation

##### Product:

Remarks: May cause skin irritation and/or dermatitis.

#### Serious eye damage/eye irritation

##### Product:

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

#### Respiratory or skin sensitisation

##### Product:

Remarks: Causes sensitisation.

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

no data available

#### Reproductive toxicity

no data available

butane:

Distillates (petroleum), hydrotreated light:

propane:

2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether:

m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate:

Pyrethrins and Pyrethroids:

#### STOT - single exposure

no data available

#### STOT - repeated exposure

## SAFETY DATA SHEET



### Enforcer Dual Action Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

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-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

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life with long lasting effects.

##### Components:



## SAFETY DATA SHEET

**ZepInc**

### Enforcer Dual Action Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

Distillates (petroleum), hydrotreated light :

Additional ecological : no data available  
information

#### 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.  
Send to a licensed waste management company.

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

#### 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 inhaled.

This pesticide is toxic to fish.

Observe label precautions.

## SAFETY DATA SHEET



### Enforcer Dual Action Insect Killer

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

#### 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  
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:

<b>TSCA</b>	On TSCA Inventory
<b>DSL</b>	All components of this product are on the Canadian DSL.
<b>AICS</b>	Not in compliance with the inventory
<b>NZIoC</b>	Not in compliance with the inventory
<b>PICCS</b>	Not in compliance with the inventory
<b>IECSC</b>	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

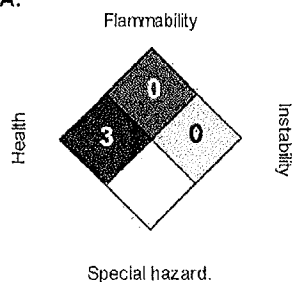
## SAFETY DATA SHEET

**Zep**Inc**Enforcer Dual Action Insect Killer**

Version 1.0

Revision Date 06/02/2015

Print Date 02/29/2016

**Further information****NFPA:****HMIS III:**

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>0</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****Warning:**

Contains gas under pressure; may explode if heated. May cause an allergic skin reaction.

**Prevention:** Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

**Response:** IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Storage:** 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:	02/29/2016

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.