

SAFETY DATA SHEET

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A00414 ENF BGMX EBMFIK16 20N16 STK

Version 2.0

Revision Date 01/21/2018

Print Date 03/24/2018

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 & Service, a unit of Zep, Inc.

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

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

Recommended use of the chemical and restrictions on use

Recommended use : Pesticide

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 elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H280 Contains gas under pressure; may explode if heated.
H301 Toxic if swallowed.

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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/doctor. Rinse mouth.
Storage:
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.

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
N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide	113-48-4	>= 1 - < 5
2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether	51-03-6	>= 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	>= 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.

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.
Wash contaminated clothing before re-use.
Remove contaminated clothing and shoes.

In case of eye contact : Remove contact lenses.

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- 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.
- Most important symptoms and effects, both acute and delayed : Effects are dependent on exposure (dose, concentration, contact time).
Effects are immediate and delayed.
Symptoms of overexposure may include disorientation; dizziness; and confusion. May progress to unconsciousness, paralysis, and convulsions.
- Toxic if swallowed.
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Foam
Dry powder
Carbon dioxide (CO₂)
- 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
Nitrogen oxides (NO_x)
- 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 : Wear self-contained breathing apparatus for firefighting if

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for firefighters

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 : 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.

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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/m ³	NIOSH REL
		TWA	800 ppm 1,900 mg/m ³	OSHA P0
		PEL	800 ppm 1,900 mg/m ³	CAL PEL
Distillates (petroleum), hydrotreated light	64742-47-8	TWA	500 ppm 2,000 mg/m ³	OSHA Z-1
		TWA	400 ppm 1,600 mg/m ³	OSHA P0
		TWA (Mist)	5 mg/m ³	OSHA Z-1
		TWA (Mist)	5 mg/m ³	OSHA P0
		TWA (Mist)	5 mg/m ³	NIOSH REL
		ST (Mist)	10 mg/m ³	NIOSH REL
		PEL (particulate)	5 mg/m ³	CAL PEL
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m ³	OSHA P0
		PEL	1,000 ppm 1,800 mg/m ³	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

: Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.
Safety glasses

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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)

Water solubility : dispersible

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

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Heat of combustion : 13.41 kJ/g

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
Strong acids

Hazardous decomposition products : Carbon dioxide (CO₂)
Carbon monoxide
Nitrogen oxides (NO_x)

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Effects are dependent on exposure (dose, concentration, contact time).
Effects are immediate and delayed.
Symptoms of overexposure may include disorientation; dizziness; and confusion. May progress to unconsciousness, paralysis, and convulsions.

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.

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

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OSHA

equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

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.

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 : 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

Components:

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

Product:

Remarks: May irritate skin.

Serious eye damage/eye irritation

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Product:

Remarks: May irritate eyes.

Respiratory or skin sensitisation

No data available

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:

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:

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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:

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.
Pesticide wastes are acutely hazardous. Improper disposal of
excess pesticide, spray mixture or rinsate is a violation of
Federal law. If these wastes cannot be disposed of by use
according to label instructions, contact your State Pesticide or
Provincial Environmental control agency, or the Hazardous
Waste Representative at the nearest EPA Regional Office for
guidance.

Contaminated packaging

: Empty remaining contents.
Dispose of as unused product.

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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

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.

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 swallowed.

Harmful if absorbed through skin.

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

TSCA list

: No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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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 : Gases under pressure
Acute toxicity (any route of exposure)

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

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 can expose you to chemicals including 2,2'-iminodiethanol, which is/are known to the State of California to cause cancer. For more information go to 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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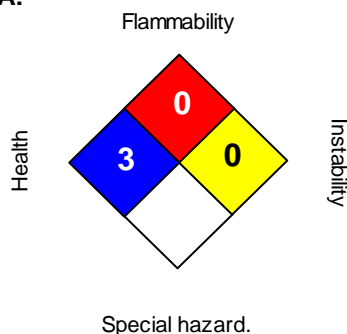
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Further information

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

Hazard statements

Precautionary statements

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

Prevention: Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product.

Response: IF SWALLOWED: Immediately call a POISON CENTER/doctor. 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.

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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.

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