

Version 1.2	Revision Date 07/06/2018	Print Date 10/24/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	Enforcer Dual Action Insect Killer
EPA ID Number:		10807-161-40849
Material number	:	0000000001047651
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 1-877-42	8-9937
For a Medical Emergency	877-541-2016 Toll Free - All Ca	alls Recorded
For a Transportation	CHEMTREC: 800-424-9300 - A	All Calls Recorded.
Emergency	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	white
Odour	neutral

GHS Classification

Gases under pressure Skin sensitisation	: Liquefied gas : Category 1
GHS label elements	
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.



Version 1.2	Revision Date 07/06/2018	Print Date 10/24/2018
	P280 Wear protective gloves. Response: P302 + P352 IF ON SKIN: Wash P333 + P313 If skin irritation or ra advice/ attention. P363 Wash contaminated clothin Storage: P410 + P403 Protect from sunligh place. P412 Do not expose to temperatu Disposal:	with plenty of soap and water. ash occurs: Get medical g before reuse. nt. Store in a well-ventilated ures exceeding 50 °C/ 122 °F.
	P501 Dispose of contents/contair regulation.	her in accordance with local

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	>= 3 - < 5
m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2- dimethylcyclopropanecarboxylate	52645-53-1	>= 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	 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. If on skin, rinse well with water. 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 with plenty of water.
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



Version 1.2	Revision Date 07/06/2018	Print Date 10/24/2018
	physician or poison control center. Take victim immediately to hospital.	
Most important symptoms and effects, both acute and delayed	: Effects are immediate and delayed. Symptoms may include irritation, red May cause an allergic skin reaction. Review section 2 of SDS to see all p	
Notes to physician	: Treat symptomatically. Symptoms r	nay be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	ater spray rbon dioxide (CO2) / powder am	
Unsuitable extinguishing media	h volume water jet	
Specific hazards during firefighting	not allow run-off from fire fight urses.	ing to enter drains or water
Hazardous combustion products	rbon dioxide (CO2) rbon monoxide noke	
Specific extinguishing methods	e extinguishing measures that cumstances and the surroundin	
Further information	llect contaminated fire extinguis ist not be discharged into drains e residues and contaminated fi disposed of in accordance with	s. re extinguishing water must
Special protective equipment for firefighters	ear self-contained breathing ap	paratus for firefighting if

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation.
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	 Sweep up or vacuum up spillage and collect in suitable container for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).



Version 1.2

Revision Date 07/06/2018

Print Date 10/24/2018

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
		PEL	800 ppm 1,900 mg/m3	CAL PEL
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
		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		PEL (particulate)	5 mg/m3	CAL PEL
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm	NIOSH REL



sion 1.2	Revision D	Date 07/06/2018	Print D	Date 10/24/2018
		TWA	1,800 mg/m3 1,000 ppm	OSHA Z-1
		TWA	1,800 mg/m3 1,000 ppm	OSHA P0
		PEL	1,800 mg/m3 1,000 ppm 1,800 mg/m3	CAL PEL
Engineering measures	: effective ve	entilation in all pr	ocessing areas	
Personal protective equip	ment			
Respiratory protection	ventilation	is provided or ex	Inless adequate loca posure assessment ecommended expos	demonstrates
Hand protection Material Remarks			workplace should b otective gloves.	e discussed
Eye protection		e wash stations vater.	nse eyes must be av or showers, or eye v	
Skin and body protection		dy protection ac	cording to the amou ous substance at th	
Hygiene measures	When using	ls before breaks g do not eat or d g do not smoke.	and at the end of w rink.	orkday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aerosol containing a liquefied gas
Colour	: white
Odour	: neutral
Odour Threshold	: No data available
рН	: 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.



Version 1.2	Revision Date 07/06/2018	Print Date 10/24/2018
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	
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	: 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
Hazardous decomposition products	: Carbon dioxide (CO2) Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Aggravated Medical	:	None known.
Condition		
Symptoms of Overexposure	:	Effects are immediate and delayed.
		Symptoms may include irritation, redness, pain, and rash.

Carcinogenicity:



Version 1.2	Revision Date 07/06/2018	Print Date 10/24/2018
IARC	No component of this product preser equal to 0.1% is identified as probab	
ACGIH	human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential	
OSHA	carcinogen by ACGIH. No component of this product preser	
NTP	equal to 0.1% is on OSHA's list of regulated carcinogens. No component of this product present at levels greater than o equal to 0.1% is identified as a known or anticipated carcinog by NTP.	
Acute toxicity		
Product:		
Acute oral toxicity	: Acute toxicity estimate : > 5,000 m Method: Calculation method	ng/kg
Acute inhalation toxicity	: Acute toxicity estimate : 83.26 mg Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method	/I
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 n Method: Calculation method	ng/kg
Components:		
Distillates (petroleum), hydr Acute oral toxicity	rotreated light: : 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	
Skin corrosion/irritation		
Product:		
Remarks: May cause skin irrit	ation in susceptible persons.	
Serious eye damage/eye irritatio	n	
Product:		
Remarks: May irritate eyes.		
Respiratory or skin sensitisation	n	
Product:		
Remarks: Causes sensitisatio	n.	
Germ cell mutagenicity		



A00442 ENF DUAL ACTI	ON EDAIK17 20N17 STK	
Version 1.2	Revision Date 07/06/2018	Print Date 10/24/2018
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		
<u>Components:</u> Distillates (petroleum), hydro Remarks: No data available	treated light:	
SECTION 12. ECOLOGICAL INFOR	RMATION	

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	

No data available

Other adverse effects

No data available Product:



Version 1.2	Revision Date 07/06/2018	Print Date 10/24/2018
Regulation	40 CFR Protection of Environment; Stratospheric Ozone - CAA Section Substances	
Remarks	This product neither contains, nor w with a Class I or Class II ODS as de Clean Air Act Section 602 (40 CFR + B).	efined by the U.S.
Additional ecological : information	An environmental hazard cannot be event of unprofessional handling or aquatic life with long lasting effects.	disposal., Harmful to
<u>Components:</u> Distillates (petroleum), hydrotr	eated 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): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

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



Version 1.2

Revision Date 07/06/2018

Print Date 10/24/2018

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 inhaled. This pesticide is toxic to fish.

Observe label precautions.

TSCA list

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

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

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)		
Pyrethrins and Pyrethroids	8003-34-7	1	999		
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 Respiratory or skin sensitisation				
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					

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.



Version 1.2

Revision Date 07/06/2018

Print Date 10/24/2018

The components of this product are reported in the following inventories:

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

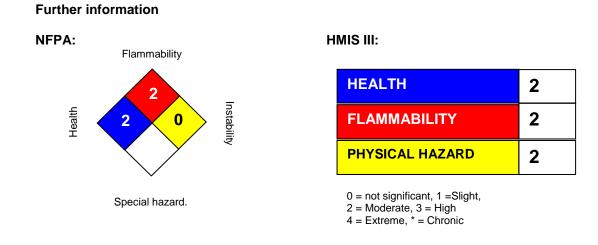
 TSCA
 On TSCA Inventory

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



OSHA - GHS Label	Information:
Hazard pictograms	
Signal word Hazard statements	 Warning: Contains gas under pressure; may explode if heated. May cause an allergic skin reaction.
Precautionary statements	 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. Do not expose to temperatures exceeding 50 °C/ 122 °F. Disposal: Dispose of contents/container in accordance with local regulation.

Version:	1.2
Revision Date:	07/06/2018



Version 1.2

Revision Date 07/06/2018

Print Date 10/24/2018

Print Date: 10/24/2018

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