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## **SECTION1. Identification of the substance/mixture and of the company/undertaking**

### **1.1. Product identifier**

Product code : FULMINE GAS-FREE BUG SPRAY 100ml  
Trades code : 00992

### **1.2. Relevant identified uses of the substance or mixture and uses advised against**

Insecticide

Private households (= general public = consumers)[SU21], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against

Do not use for purposes other than those listed

### **1.3. Details of the supplier of the safety data sheet**

Bergen s.r.l.  
Via Roma, 90  
37060 Castel d'Azzano (Verona)  
Tel. +39 045 512090 - 045 518009  
Fax. +39 045 512777  
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Produced by  
BERGEN s.r.l.  
Via Roma, 90  
37060 Castel d'Azzano (Verona)

### **1.4. Emergency telephone number**

Centro Antiveneni Ospedale Riuniti (BG) - 800.883300 24 ore su 24

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## **SECTION2. Hazards identification**

### **2.1. Classification of the substance or mixture**

2.1.1 Classification according to Directive 1999/45/EEC:

Classification:  
F; R11

Nature of special risks attributed:  
R11 - Highly flammable.

The product easy inflames if subordinate to an ignition source.

### **2.2. Label elements**

Labeling according to Directive (EC) No 1999/45:

Provided symbols:  
F - Highly flammable



**Attributed risk:**

R11 - Highly flammable.

**Precautionary statements:**

S2 - Keep out of the reach of children.

S9 - Keep container in a well-ventilated place.

S16 - Keep away from sources of ignition — No smoking.

S29/56 - Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

It is compulsory to provide the container with an indication of danger to the touch

**2.3. Other hazards**

The substance / mixture does NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

**SECTION3. Composition/information on ingredients**
**3.1 Substances**

Irrilevant

**3.2 Mixtures**

Refer to paragraph 16 for full text of risk phrases and hazard statements

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
ethanol	> 50 <= 100%	F; R11 Flam. Liq. 2, H225	603-002-00-5	64-17-5	200-578-6	01-2119457610-
N,N-diethyl-m-toluamide	> 5 <= 10%	Xn; R22 Xi; R36/38 R52/53 Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	616-018-00-2	134-62-3	205-149-7	n.a.
Perfume	> 0,1 <= 1%	Xi; R36 Xi; R43 N; R51/53	n.a.	n.a.	n.a.	n.a.
Parfume	> 0,1 <= 1%	Xi; R38 Xi; R43 N; R51/53 Xn; R65	n.a.	n.a.	n.a.	n.a.

**SECTION4. First aid measures**
**4.1. Description of first aid measures**
**Inhalation:**

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

**Direct contact with skin (of the pure product):**

Wash thoroughly with soap and running water.

**Direct contact with eyes (of the pure product):**

Wash immediately and thoroughly with running water for at least 10 minutes.

**Ingestion:**

Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

**4.2. Most important symptoms and effects, both acute and delayed**

No data available.

**4.3. Indication of any immediate medical attention and special treatment needed**

If you experience harmful symptoms, contact a physician immediately.

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**SECTION5. Firefighting measures**

**5.1. Extinguishing media**

Advised extinguishing agents:

Water spray, CO<sub>2</sub>, foam, dry chemical, depending on the materials involved in the fire.  
CO<sub>2</sub> or dry powder extinguisher

Extinguishing means to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

**5.2. Special hazards arising from the substance or mixture**

No data available.

**5.3. Advice for firefighters**

Use protection for the breathing apparatus  
Safety helmet and full protective suit.  
The spray water can be used to protect the people involved in the extinction  
You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)  
Keep containers cool with water spray

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**SECTION6. Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke  
Wear gloves and protective clothing

6.1.2 For emergency responders:

Wear gloves and protective clothing  
Eliminate all unguarded flames and possible sources of ignition. No smoking.  
Provision of sufficient ventilation.  
Evacuate the danger area and, in case, consult an expert.

**6.2. Environmental precautions**

Contain spill with earth or sand.  
If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities.  
Discharge the remains in compliance with the regulations

**6.3. Methods and material for containment and cleaning up**

6.3.1 For containment:

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Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.  
Prevent it from entering the sewer system.

6.3.2 For cleaning up:  
After wiping up, wash with water the area and materials involved

6.3.3 Other information:  
None in particular.

#### **6.4. Reference to other sections**

Refer to paragraphs 8 and 13 for more information

## **SECTION 7. Handling and storage**

### **7.1. Precautions for safe handling**

Avoid contact and inhalation of vapors. See also paragraph 8 below.  
At work do not eat or drink.  
Do not smoke at work

### **7.2. Conditions for safe storage, including any incompatibilities**

Keep in original container closed tightly. Do not store in open or unlabeled containers.  
Keep containers upright and safe by avoiding the possibility of falls or collisions.  
Always store in well ventilated areas.  
Keep away from open flames, sparks and heat sources. Avoid direct sunlight exposure.

### **7.3. Specific end use(s)**

Private households (= general public = consumers):  
Store in cool and dry places.

Public domain (administration, education, entertainment, services, craftsmen):  
Handle with care.  
Store in ventilated place away from heat sources,  
Keep the container tightly closed.

## **SECTION 8. Exposure controls/personal protection**

### **8.1. Control parameters**

No data available on the mixture.

Related to contained substances:

ethanol

TLV: 1000 ppm as TWA A4 (not classifiable as a human carcinogen) (ACGIH 2004). MAK: 500 ppm 960 mg / m Peak limitation category: II (2), Class 5 of carcinogenicity; Pregnancy risk group: C, germ cell mutagen group: 5; (DFG 2004).

N,N-diethyl-m-toluamide  
No data available.

Perfume  
No substance.

Parfume  
No Substance.

**8.2. Exposure controls**

Appropriate engineering controls:

Private households (= general public = consumers):

Open with caution. Close the container immediately after its use.

Adopt the appropriate protective measures.

Public domain (administration, education, entertainment, services, craftsmen):

Open with caution. Close the container immediately after its use.

Adopt the appropriate protective measures.

Individual protection measures:

(a) Eye / face protection

Not needed for normal use.

(b) Skin protection

(i) Hand protection

Not needed for normal use.

(ii) Other

Wear normal work clothing.

(c) Respiratory protection

Not needed for normal use.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good working practices to avoid pollution into the environment.

**SECTION 9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

Physical and chemical properties	Value	Determination method
Appearance	liquid	
Odour	characteristic	
Odour threshold	not determined	
pH	irrelevant	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	not determined	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	not determined	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	0.8 a 20°C	
Solubility	in water	
Water solubility	complete	

Physical and chemical properties	Value	Determination method
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	less than 21 °C	
Decomposition temperature	not determined	
Viscosity	not determined	
Explosive properties	not determined	
Oxidising properties	not determined	

### 9.2. Other information

No data available.

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

Related to contained substances:  
ethanol  
The product is stable under normal conditions of use and storage.

### 10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

### 10.3. Possibility of hazardous reactions

There are no hazardous reactions

### 10.4. Conditions to avoid

Avoid exposure to heat sources and naked flames.

### 10.5. Incompatible materials

Nobody in particular.

### 10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

## SECTION 11. Toxicological information

### 11.1. Information on toxicological effects

No toxicological tests have been performed on the mixture.

- (a) acute toxicity: not applicable
- (b) irritation: not applicable
- (c) corrosivity: not applicable
- (d) sensitisation: not applicable
- (e) repeated dose toxicity: not applicable

- (f) carcinogenicity: not applicable  
(g) mutagenicity: not applicable  
(h) toxicity for reproduction: not applicable

Related to contained substances:

ethanol

ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its vapor and by ingestion. INHALATION RISK: A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20C. EFFECTS OF SHORT-TERM EXPOSURE: The substance irritating to the eyes. Inhalation of high concentration of vapor may cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: The liquid defats the skin. The substance may have effects on the high central nervous system, respiratory tract, causing irritation, headaches, fatigue and poor concentration. See Notes. ACUTE HAZARDS / SYMPTOMS Cough. Headache. Tiredness. Drowsiness. SKIN Dry skin. Redness. Pain. Burning. Ingestion Burning sensation. Headache. Confusion. Vertigo. Unconsciousness. NOTES The consumption of ethanol during pregnancy can have adverse effects on the unborn child. Chronic ingestion of ethanol may cause liver cirrhosis.

LD50 (rat) Oral (mg/kg body weight) = 14000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 20000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 20000

N,N-diethyl-m-toluamide

Acute Toxic:

Oral: LD50 rat toxic = 667 mg/kg; Rat LD50 = 1170 mg/kg; Rabbit LD50 = 1584 mg/kg;

Skin toxic rat: LD50 = 5000 mg/kg; Rat LD50 = 3170 mg/kg; Rabbit LD50 = 3180 mg/kg;

Inhalation: toxic rat: LC50 = 760ppm

Corrosion/irritation: not irritating to the skin, irritating to mucous membranes and abraded skin.

Eye irritation: May cause moderate irritation.

Respiratory sensitization: n.a.

Skin sensitisation: NA

In vitro Mutagenicity: non-mutagenic.

Carcinogenicity: non carcinogenic.

Toxic for reproduction: no reproductive effect

Perfume

Irritating to eyes, skin sensitizer.

CAS Benzylbenzoate: 120-51-4 ingestion LC50: 500.00

Coumarin CAS: 91-64-5 ingestion LC50: 500.00

Parfume

Skin irritant, sensitizing to the skin, harmful.

CAS Benzylbenzoate: 120-51-4 ingestion LC50: 500.00

Thymol CAS: 89-83-8 SWALLOWING LC50: 500.00

## SECTION12. Ecological information

### 12.1. Toxicity

The product has not been tested for environmental impact in the event of accidental release in the environment.

Related to contained substances:

ethanol

Specification: NOEC.

Skeletonema costatum: parameter.

Value: 3.24 grams per litre.

Test period: 5 g.

Specification: NOEC.

Parameter: Daphnia magna.

Value: > 10 mg/l.  
Test period: 21 g.  
Specification: EC10.  
Parameter: Algae.  
chlorella vulgaris.  
Value: 11.5 mg/l.  
Specification: EC10.  
Parameter: Selenastrum capricornutum.  
Value: 0.44 g/l.  
Specification: EC50.  
Parameter: Algae.  
chlorella vulgaris.  
Value: 275 mg/l.  
Test period: 72 h.  
Specification: EC50.  
Parameter: Selenastrum capricornutum.  
Value: 12.9 g/l.  
Test period: 72 h.  
Specification: LC50.  
Parameter: Fish.  
Salmo gairdneri.  
Value: 13 g/l.  
Test period: 96 h.  
Specification: LC50.  
Parameter: Fish.  
Minnows Pimephales.  
Value: 13.5 g/l.

N,N-diethyl-m-toluamide

Harmful to aquatic organisms with long-term effects.

Fish: rainbow trout LC50 (83d): 71.25 ppm; Pimephales promelas fish: LC50 (83d): 110mg/L; Birds: Northern bobwhite LC50: 1375 mg/Kg; Crustaceans: Daphnia magna EC50 (48 h): 56 ppm

Perfume

Toxic to aquatic organisms.

Parfume

Toxic to aquatic organisms.

Use according to good working practices to avoid pollution into the environment.

## 12.2. Persistence and degradability

No data available on the mixture.

Related to contained substances:

ethanol

No data available

N,N-diethyl-m-toluamide

Quickly degradable in atmosphere, moderate rate of biodegradabilit

Perfume

No data available.

Parfume

No data available.

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### **12.3. Bioaccumulative potential**

No data available on the mixture.

Related to contained substances:

ethanol

There are no known significant phenomena of bioaccumulation.

N,N-diethyl-m-toluamide

n.d.

Perfume

No data available.

Parfume

No data available.

### **12.4. Mobility in soil**

No data available on the mixture.

Related to contained substances:

ethanol

Completely soluble in water, vaporizable into the atmosphere.

N,N-diethyl-m-toluamide

n.d.

Perfume

No data available. Avoid the dispersion in the soil and in the sewers.

Parfume

No data available.

Avoid the dispersion in the soil and in the sewers.

### **12.5. Results of PBT and vPvB assessment**

The substance / mixture does NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

### **12.6. Other adverse effects**

No adverse effects

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## **SECTION13. Disposal considerations**

### **13.1. Waste treatment methods**

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

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## **SECTION14. Transport information**

### **14.1. UN number**

1170

ADR exemption because compliance with the following characteristics:

Combination packagings: per inner packaging 1 L per package 30 Kg

Inner packagings placed in shrink-wrapped or stretch-wrapped trays: per inner packaging 1 L per package 20 Kg



### **14.2. UN proper shipping name**

ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

### **14.3. Transport hazard class(es)**

Class : 3

Label : 3

Tunnel restriction code : D/E

Limited quantities : 1 L

EmS : F-E, S-D

### **14.4. Packing group**

II

### **14.5. Environmental hazards**

Product is not environmentally hazardous

Marine polluting agent : Not

### **14.6. Special precautions for user**

The transport must be carried out by authorised vehicles carrying dangerous goods in accordance with the requirements of the current edition of A.D.R Agreement. and the national provisions applicable.

The transport must be carried out in the original packaging and in packages that are made from materials resistant from the content and not likely to generate with this dangerous reactions. Attendants to the loading and unloading of dangerous goods must have received proper training on the risks presented by prepared and on possible procedures to be taken in the event of emergency situations

### **14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

It is not intended to carry bulk

## **SECTION15. Regulatory information**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Legislative Decree no. 3/2/1997 no. 52 (Classification, packaging and labeling of dangerous substances). Legislative Decree 14.3.2003 n. 65 (Classification, packaging and labeling of dangerous substances). Leg. 02/02/2002 n. 25 (Risks related to chemical agents at work). D.M. Working 26/02/2004 (Occupational exposure limit); DM 04/03/2007 (Implementation of Directive no. 2006/8/EC). Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n.790/2009.D.Lgs. September 21, 2005 n. 238 (Seveso Ter).

### **15.2. Chemical safety assessment**

No chemical safety assessment was carried out by the supplier

## **SECTION16. Other information**

### **16.1. Other information**

Points modified compared to previous release: 2.2. Label elements, 2.3. Other hazards, 4.3. Indication of any immediate medical attention and special treatment needed, 7.2. Conditions for safe storage, including any incompatibilities, 8.1. Control parameters, 10.1. Reactivity, 10.4. Conditions to avoid, 10.5. Incompatible materials, 11.1. Information on toxicological effects, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in soil, 14.1. UN number, 14.2. UN proper shipping name, 14.3. Transport hazard class(es), 14.4. Packing group, 14.5. Environmental hazards, 14.6. Special precautions for user, 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of the sentences of risk set out in paragraph 3

- R11 = Highly flammable.
- R22 = Harmful if swallowed.
- R36 = Irritating to eyes.
- R38 = Irritating to skin.
- R43 = May cause sensitization by skin contact.
- R51 = Toxic to aquatic organisms.
- R52 = Harmful to aquatic organisms.
- R53 = May cause long-term adverse effects in the aquatic environment.
- R65 = Harmful: may cause lung damage if swallowed.

Description of the hazard statements exposed to point 3

- H225 = Highly flammable liquid and vapour.
- H302 = Harmful if swallowed.
- H315 = Causes skin irritation.
- H319 = Causes serious eye irritation.
- H412 = Harmful to aquatic life with long lasting effects.

Classification based on data of all mixture components

Main normative references:

- Directive 1999/45/EC
- Directive 2001/60/EC
- Regulation 1272/2008/EC
- Regulation 2010/453/EC

\*\*\* This Board cancels and replaces any previous edition.

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