

## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

078912703

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

078912704 078945890

**SAFETY DATA SHEET**  
**SERESTO COLLAR**

122000005913

Version 1.6

Revision Date 12/03/2012

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

**Product Name:** SERESTO Collar for Dogs  
**MSDS Number:** 122000005913

**Use** : veterinary medicine

**Company**

BAYER HEALTHCARE LLC  
Animal Health Division  
12707 Shawnee Mission Parkway  
(West 63rd)  
Shawnee, KS 66216-1846  
USA  
(800) 633-3796

**In case of emergency:** (800) 422-9874  
Chemtrec: (800) 424-9300  
BAYER INFORMATION PHONE: (800) 633-3796  
INTERNATIONAL: (703) 527-3887

**2. HAZARDS IDENTIFICATION****Emergency Overview**

**CAUTION! Colour:** grey **Form:** solid  
May be harmful if swallowed.

**Hazard Communication (29CFR 1910.1200)**

No Carcinogenic substances as defined by IARC, NTP and/or OSHA

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Weight percent	Components	CAS-No.
10%	Imidacloprid	138261-41-3
40 - 70%	Tradeseecret	

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1 - 5%

Tradeseecret

### Other Ingredients

#### Weight percent

4.5%

#### Components

flumethrin

#### CAS-No.

69770-45-2

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## 4. FIRST AID MEASURES

**General advice:** Take off all contaminated clothing immediately.

**If inhaled:** Remove to fresh air. If symptoms persist, call a physician.

**In case of skin contact:** After contact with skin, wash immediately with plenty of soap and water. If skin reactions occur, contact a physician.

**In case of eye contact:** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**If swallowed:** If swallowed, seek medical advice immediately and show this container or label.

**Contact Number:** Use the Bayer Emergency Number in Section 1

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## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Any

**Specific hazards during fire fighting:** Fire may cause evolution of: Carbon monoxide Carbon dioxide (CO<sub>2</sub>)

**Special protective equipment for fire-fighters:** In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

**Further information:** Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protective equipment.

**Methods for cleaning up:** Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**Additional advice:** Avoid dust formation.

**Further Accidental**      Avoid dust formation.

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### Release Notes

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## 7. HANDLING AND STORAGE

### Handling:

Avoid dust formation. Only handle product with local exhaust ventilation. Avoid contact with skin, eyes and clothing.

Take measures to prevent the build up of electrostatic charge. Keep away from open flames, hot surfaces and sources of ignition.

### Storage:

Store in a cool dry place, away from oxidizing agents and flammable liquids.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Respiratory protection:

Recommended Filter type: HEPA

### Hand protection:

Chemically resistant gloves.

### Eye protection:

Safety glasses

### Other protective measures:

Wear suitable protective equipment.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Colour:	grey	
Melting point:	140 °C	DIN ISO 3146
Bulk density:	550 kg/m <sup>3</sup>	ISO 697
pH:	neutral	
Flash point:		
Ignition temperature:	219.2 °F (104 °C)	DIN 51758
Ignition temperature:	no data available	
Explosion limits:	no data available	

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## 10. STABILITY AND REACTIVITY

**Conditions to avoid:** Avoid extreme heat.

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**Materials to avoid:** Oxidizing agents

**Hazardous reactions:** None known.

**Thermal decomposition:**

no data available

**Hazardous decomposition products:**

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>)

**Oxidizing properties:**

No statements available.

**Impact Sensitivity:**

no data available

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**11. TOXICOLOGICAL INFORMATION**

**Other information on toxicity:**

Tradeseecret

**Acute oral toxicity:**

flumethrin

LD50 rat: 175 mg/kg

Test substance: in corn oil

Imidacloprid

LD50 rat: 424 mg/kg

Tradeseecret

LD50 rat: 4,640 mg/kg

Tradeseecret

**Acute inhalation toxicity:**

flumethrin

LC50 rat: 0.572 mg/l, 4 h

Method: OECD Test Guideline 403

Imidacloprid

LC50 rat: > 5.323 mg/l, 4 h

Method: OECD Test Guideline 403

LC50rat: > 69 mg/l, 4 h

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**Acute dermal toxicity:**

flumethrin

LD50 rat, female: 1,436 mg/kg

Imidacloprid

LD50 rat: > 5,000 mg/kg

Tradesecret

LD50 rabbit: > 5,000 mg/kg

**Acute toxicity (other routes of administration):**

Tradesecret

LD50 intravenous mouse: 23 mg/kg

**Skin irritation:**

flumethrin

Result: No skin irritation

Test substance: 10% solution

in olive oil

Imidacloprid

rabbit

Result: No skin irritation

Tradesecret

rabbit

Result: Moderate skin irritation

**Eye irritation:**

flumethrin

Result: No eye irritation

Test substance: 10% solution

in olive oil

Imidacloprid

rabbit

Result: No eye irritation

Tradesecret

Result: non-irritant

Test substance: Data on a comparable substance

**Sensitisation:**

flumethrin

Skin sensitization guinea pig

Result: Did not cause sensitization on laboratory animals.

Method: Magnusson and Kligmann maximization test

Imidacloprid

Skin sensitization guinea pig

Result: Did not cause sensitization on laboratory animals.

Method: Magnusson and Kligmann maximization test

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**Genotoxicity in vitro:**

flumethrin

Result: No evidence of a genotoxic effect.

Imidacloprid

Ames test

Result: negative

Tradesecret

Ames test

Result: negative

Test substance: Data on a comparable substance

**Genotoxicity in vivo:**

flumethrin

Result: No evidence of a genotoxic effect.

**Carcinogenicity:**

flumethrin

rat:

Result: Animal testing did not show any carcinogenic effects.

mouse:

Result: Animal testing did not show any carcinogenic effects.

**Reproductive toxicity:**

flumethrin

rat: Result: Animal testing did not show any effects on fertility.

**Teratogenicity:**

flumethrin

Result: Did not show teratogenic effects in animal experiments.

**Pharmaceutic effects:**

flumethrin

Antiparasitic agent

Imidacloprid

Insecticide

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**12. ECOLOGICAL INFORMATION**

**General advice:**

Do not allow to enter surface waters or groundwater.

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**Toxicity to fish:**

flumethrin

Acute Fish toxicity: LC50 0.17 mg/l

Test species: *Oncorhynchus mykiss* (rainbow trout) Duration of test: 96 h

Method: OECD Test Guideline 203

Imidacloprid

Acute Fish toxicity: LC50 280 mg/l

Test species: *Cyprinus carpio* (Carp) Duration of test: 96 h

Acute Fish toxicity: LC50 211 mg/l

Test species: *Oncorhynchus mykiss* (rainbow trout) Duration of test: 96 h

Acute Fish toxicity: LC50 237 mg/l

Test species: *Leuciscus idus* (Golden orfe) Duration of test: 96 h

**Toxicity to daphnia and other aquatic invertebrates:**

flumethrin

EC50 0.0027 mg/l

Test species: *Daphnia magna* (Water flea) Duration of test: 48 h

Method: OECD Test Guideline 202

Imidacloprid

EC50 85 mg/l

Test species: *Daphnia magna* (Water flea) Duration of test: 48 h

EC50 0.055 mg/l

Test species: *Hyalella azteca* Duration of test: 96 h

LC50 0.0552 mg/l

Test species: *Chironomus Riparius* (non-biting midge) Duration of test: 24 h

**Toxicity to algae:**

flumethrin

IC50 0.59 mg/l

tested on: *Desmodesmus subspicatus* (green algae) Duration of test: 72 h

Method: OECD Test Guideline 201

Imidacloprid

EC50 > 100 mg/l

tested on: *Pseudokirchneriella subcapitata* (green algae) Duration of test: 72 h

EC50 > 10 mg/l

tested on: *Desmodesmus subspicatus* (green algae) Duration of test: 72 h

**Biodegradability:**

flumethrin

0 %, 28 d Not readily biodegradable.

Method: OECD TG 301 F

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### **Bioaccumulation:**

Imidacloprid

Low potential for bioaccumulation

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## **13. DISPOSAL CONSIDERATIONS**

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

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## **14. TRANSPORT INFORMATION**

### **Land transport (CFR)**

Non-Regulated

### **Sea transport (IMDG)**

Non-Regulated

### **Air transport (ICAO / IATA cargo aircraft only)**

Non-Regulated

### **Air transport (ICAO / IATA passenger and cargo aircraft)**

Non-Regulated

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## **15. REGULATORY INFORMATION**

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)**

**Components**

None

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required**

**Components**

None

**US. EPA CERCLA Hazardous Substances (40 CFR 302) Components**

None

**California Prop. 65**

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**To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.**

**OSHA Hazcom Standard Rating**

Hazardous

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## **16. OTHER INFORMATION**

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

### **Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.