

Version 2.0 Revision Date 11/05/2014

#### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product informationSERESTO COLLAR FOR LARGE DOGS

**Product Name:** SERESTO COLLAR MSDS Number: 122000005913

**Use** : veterinary medicine, unfinished

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.

## **GHS Classification:**

Not a dangerous substance / mixture according to GHS.

## **GHS Label element:**

Not a dangerous substance / mixture according to GHS.

### Other hazards which do not result in classification:

St 2 (= dust explosion tendency)

Version 2.0

Revision Date 11/05/2014

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Weight percent<br/>10%Components<br/>ImidaclopridCAS-No.<br/>138261-41-3

40 - 70% Tradesecret

1 - 5% Tradesecret

Other Ingredients

Weight percent Components CAS-No. 4.5% Flumethrin 69770-45-2

#### 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

#### **5. FIREFIGHTING MEASURES**

Suitable extinguishing media: Any

**Specific hazards during firefighting:** Fire may cause evolution of: Carbon monoxide (CO) Carbon dioxide (CO2)

**Special protective equipment for firefighters:** 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.

#### 6. ACCIDENTAL RELEASE MEASURES

Version 2.0 Revision Date 11/05/2014

**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.

**Release Notes** 

#### 7. HANDLING AND STORAGE

#### Handling:

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

No special protective measures against fire required.

#### Storage:

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

## 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.

Please consult label for end-user requirements.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form: solid Colour: grey

Odour: No applicable information is available Odour Threshold: No applicable information is available

Melting point: 140 °C DIN ISO 3146

ISO 697

## SAFETY DATA SHEET SERESTO COLLAR

Version 2.0 Revision Date 11/05/2014

Boiling point/boiling range: No applicable information is available

Density: No applicable information is available

Bulk density: 550 kg/m3

Vapour pressure:

Viscosity, dynamic:

Viscosity, kinematic:

No applicable information is available

Viscosity, kinematic:

No applicable information is available

Miscibility with water:

No applicable information is available

Water solubility:

No applicable information is available

pH: neutral

Relative density:

Partition coefficient:

No applicable information is available
Solubility(ies):

No applicable information is available
No applicable information is available
Flash point:

No applicable information is available
Flammability (solid, gas):

No applicable information is available
Ignition temperature:

No applicable information is available
Explosion limits:

No applicable information is available

#### 10. STABILITY AND REACTIVITY

Conditions to avoid: Avoid extreme heat.

Materials to avoid: Oxidizing agents

Hazardous reactions: None known.

### Thermal decomposition:

185 °C

heating rate: 3 K/min

Decomposition energy: 440 kJ/kg

## **Hazardous decomposition products:**

Carbon monoxide (CO), Carbon dioxide (CO2)

Dust explosion class: St 2 (= dust explosion tendency)

Burning number: 3 at 20 °C

Local burning or glowing with, at the most, only slight spreading

5 at 100 °C

Burning with flames or flying sparks.

## **Oxidizing properties:**

No statements available.

## **Impact Sensitivity:**

no data available

Version 2.0 Revision Date 11/05/2014

#### 11. TOXICOLOGICAL INFORMATION

## Other information on toxicity:

Tradesecret

References to equivocal tumorigenic agent by RTECS criteria.

## Acute oral toxicity:

Acute toxicity estimate (ATE) > 2,000 mg/kg May be harmful if swallowed. Method: Calculation method Calculated for GHS Classification and Labelling.

#### Acute inhalation toxicity:

Acute toxicity estimate (ATE) > 5 mg/l May be harmful if inhaled. Method: Calculation method Calculated for GHS Classification and Labelling.

### Acute dermal toxicity:

Flumethrin

LD50 rat, female: 1,436 mg/kg Harmful in contact with skin.

Imidacloprid

LD50 rat: > 5,000 mg/kg

The substance or mixture has no acute dermal toxicity

Tradesecret

LD50 rabbit: > 5,000 mg/kg

The substance or mixture has no acute dermal toxicity

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

Tradesecret

LD50 intravenous mouse: 23 mg/kg

#### Skin irritation:

Flumethrin rabbit

Result: No skin irritation

Imidacloprid rabbit

Result: No skin irritation

Tradesecret rabbit

Result: Moderate skin irritation

Version 2.0

Revision Date 11/05/2014

## Eye irritation:

Flumethrin rabbit

Result: No eye irritation

Imidacloprid rabbit

Result: No eye irritation

Tradesecret

Result: No eye irritation

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

#### Genotoxicity in vitro:

Flumethrin

Result: No evidence of a genotoxic effect.

Imidacloprid Ames test Result: negative

In vitro tests did not show mutagenic effects

Tradesecret Ames test Result: negative

Test substance: Data on a comparable substance

### Genotoxicity in vivo:

Flumethrin

Result: No evidence of a genotoxic effect.

**Imidacloprid** 

Result: No indication of mutagenic effects., No evidence of a genotoxic effect.

## Carcinogenicity:

Flumethrin

rat:

Result: Animal testing did not show any carcinogenic effects.

Version 2.0

mouse:

Result: Animal testing did not show any carcinogenic effects.

Imidacloprid

Result: Animal testing did not show any carcinogenic effects.

## Reproductive toxicity:

Flumethrin

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

**Imidacloprid** 

Result: Animal studies have produced no evidence of toxic effects on reproduction.

Revision Date 11/05/2014

#### Teratogenicity:

Flumethrin

Result: Did not show teratogenic effects in animal experiments.

Imidacloprid

Result: Animal studies have produced no evidence of harmful effects on development.

#### Pharmaceutic effects:

Flumethrin

Antiparasitic agent

Imidacloprid Insecticide

#### Carcinogenicity:

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

### STOT - single exposure:

no data available

## STOT - repeated exposure:

## Components:

#### 138261-41-3:

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

## 12. ECOLOGICAL INFORMATION

#### General advice:

Do not allow to enter surface waters or groundwater.

## 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 203

Version 2.0 Revision Date 11/05/2014

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

Tradesecret

semi-static test: LC50 > 100 mg/l

Test species: Leuciscus idus (Golden orfe)

Method: ISO 7346/2

LC50 > 100 mg/l

Test species: Danio rerio (zebra fish)

Method: ISO 7346/2

## 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 202

Imidacloprid EC50 0.055 mg/l

Test species: Hyalella azteca Duration of test: 96 h

### Toxicity to algae:

Flumethrin IC50 0.59 mg/l

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

Method: OECD 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

#### Toxicity to bacteria:

**Imidacloprid** 

EC50 > 10,000 mg/l

tested on: activated sludge micro-organism

Method: OECD 209

Tradesecret EC0 > 100 mg/l

tested on: Pseudomonas putida

Test substance: Data on a comparable substance

Version 2.0 Revision Date 11/05/2014

**Biodegradability:** 

Flumethrin

0 %, 28 d not rapidly biodegradable

Method: OECD 301 F

Tradesecret

> 60 %, rapidly biodegradable

Test substance: Data on a comparable substance

Tradesecret

Not readily biodegradable.

#### **Bioaccumulation:**

**Imidacloprid** 

Low potential for bioaccumulation

#### 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.

#### 14. TRANSPORT INFORMATION

Land transport (CFR)

non-regulated

**US Sea transport (IMDG)** 

non-regulated

US Air transport (ICAO / IATA cargo aircraft only)

non-regulated

US Air transport (ICAO / IATA passenger and cargo aircraft)

non-regulated

**International IATA** 

UN Number 3077

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(FLUMETHRIN)

Class 9
Packaging group III
Dangerous goods labels 9

Version 2.0 Revision Date 11/05/2014

Environmentally hazardous yes

**International IMDG** 

UN Number 3077

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(FLUMETHRIN)

Class 9
Packaging group III
IMDG-Labels 9
Marine Pollutant yes

#### 15. REGULATORY INFORMATION

Other regulations: No statements available.

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

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

#### 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

Version 2.0

Revision Date 11/05/2014

may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.