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

Product information
Product Name: Advantus
MSDS Number: 122000010232

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

Form: solid

GHS Classification:
Not a dangerous substance / mixture according to GHS.

GHS Label element:
Not a dangerous substance / mixture according to GHS.

Hazard Communication (29CFR 1910.1200)

3. COMPOSITION/INFORMATION ON INGREDIENTS
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.

**Most important symptoms and effects, both acute and delayed:** No information available.

**Notes to physician:** No information available.

**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

**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 Release Notes**

Avoid dust formation.

7. HANDLING AND STORAGE

**Handling:**
Industrial uses: Avoid dust formation. Only handle product with local exhaust ventilation. Avoid contact with skin, eyes and clothing.

No special protective measures against fire required.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Hand protection:**
Chemically resistant gloves.

**Eye protection:**
Safety glasses

**Other protective measures:**
No special safety precautions are required during handling of pharmaceuticals in their intended finished form (tablets or liquid formulations) by chemists, the hospital's medical staff or patients.

Wear suitable protective equipment.

For the intake of ready for use pharmaceuticals or the external use on the skin please read the label and the package leaflet.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Form:** solid

**Colour:** No applicable information is available
10. STABILITY AND REACTIVITY

**Conditions to avoid:** no data available

**Materials to avoid:** Oxidizing agents

**Hazardous reactions:** None known.

**Thermal decomposition:**

no data available

**Hazardous decomposition products:**
Carbon monoxide (CO), Carbon dioxide (CO2)

**Oxidizing properties:**

No statements available.

**Impact Sensitivity:**
no data available
11. TOXICOLOGICAL INFORMATION

Other information on toxicity:
Polyhydric alcohol
Inhalation of vapors causes irritation of the respiratory tract.

Ingestion of large quantities: Vomiting, Abdominal pain, headaches, Dizziness, Diarrhoea, Cyanosis

Acute oral toxicity:
Imidacloprid
LD50 rat: 424 mg/kg

Polyhydric alcohol
LD50 rat: > 2,000 mg/kg

(Pregelatinized) Starch
Tradesecret
LD50 rat: > 2,000 mg/kg

Tradesecret
LD50 rat: 4,640 mg/kg

Acute inhalation toxicity:
Imidacloprid
LC50 rat: > 5,323 mg/l, 4 h
Method: OECD Test Guideline 403

LC50 rat: > 69 mg/l, 4 h

Polyhydric alcohol
LC50 rat, male: > 2.75 mg/l, 4 h
Method: Calculation method

Acute dermal toxicity:
Imidacloprid
LD50 rat: > 5,000 mg/kg

Polyhydric alcohol
LD50 rabbit: > 18,700 mg/kg

Tradesecret
LD50 rabbit: > 5,000 mg/kg

Acute toxicity (other routes of administration):
(Pregelatinized) Starch
LD50 intraperitoneal mouse: 6,600 mg/kg

Tradesecret
LD50 intravenous mouse: 23 mg/kg

Skin irritation:
Imidacloprid
rabbit
Result: No skin irritation

Tradesecret
Result: May irritate skin.

Polyhydric alcohol
rabbit
Result: No skin irritation

(Pregelatinized) Starch
rabbit
Result: Mild skin irritation
Method: Draize Test

Tradesecret
rabbit
Result: No skin irritation
Method: Draize Test

Tradesecret
rabbit
Result: Moderate skin irritation

**Eye irritation:**
Imidacloprid
rabbit
Result: No eye irritation

Tradesecret
Result: May irritate eyes.

Polyhydric alcohol
rabbit
Result: No eye irritation

Tradesecret
rabbit
Result: No eye irritation
Method: Draize Test

Tradesecret
Result: No eye irritation
Test substance: Data on a comparable substance

**Sensitisation:**
Imidacloprid
Skin sensitization guinea pig
Result: Did not cause sensitization on laboratory animals.
Method: Magnusson and Kligmann maximization test
Polyhydric alcohol

Patch test on human volunteers did not demonstrate sensitization properties.

**Genotoxicity in vitro:**

- **Imidacloprid**
  - Ames test
  - Result: negative

- **Polyhydric alcohol**
  - Ames test
  - Result: negative

- **Tradesecret**
  - Ames test *Escherichia coli*
  - Result: negative

**Pharmaceutic effects:**

- **Imidacloprid**
- **Insecticide**

**Carcinogenicity:**

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

**STOT - single exposure:**

no data available

**STOT - repeated exposure:**

no data available

---

12. ECOLOGICAL INFORMATION

**General advice:**

Do not allow to enter surface waters or groundwater.

**Toxicity to fish:**

- **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
Polyhydric alcohol
Acute Fish toxicity: LC50 > 5,000 mg/l
Test species: Carassius auratus (goldfish)  Duration of test: 24 h

Acute Fish toxicity: LC100  51,000 - 57,000 mg/l
Test species: Oncorhynchus mykiss (rainbow trout)  Duration of test: 96 h

Acute Fish toxicity: LC50 > 250 mg/l
Test species: Leuciscus idus (Golden orfe) Duration of test: 48 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:**
Imidacloprid
EC50 0.055 mg/l
Test species: Hyalella azteca  Duration of test: 96 h

Polyhydric alcohol
EC50 > 10,000 mg/l
Test species: Daphnia magna (Water flea)  Duration of test: 24 h

EC0 > 500 mg/l
Test species: Daphnia magna (Water flea)  Duration of test: 24 h

**Toxicity to algae:**
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

Polyhydric alcohol
IC5 > 10,000 mg/l
tested on: Scenedesmus quadricauda (Green algae)  Duration of test: 7 d

**Toxicity to bacteria:**
Imidacloprid
EC50 > 10,000 mg/l
tested on: activated sludge micro-organism
Method: OECD TG 209

Polyhydric alcohol
EC5 > 10,000 mg/l
tested on: Pseudomonas putida
Duration of test: 16 h
EC5 3,200 mg/l
tested on: Protozoa
Duration of test: 72 h

Tradesecret
EC0 > 100 mg/l
tested on: Pseudomonas putida
Test substance: Data on a comparable substance

**Biodegradability:**
Tradesecret
rapidly biodegradable

Polyhydric alcohol
63 %, 14 d rapidly biodegradable
Method: OECD TG 301 C

Tradesecret
> 60 %, rapidly biodegradable
Test substance: Data on a comparable substance

**Bioaccumulation:**
Imidacloprid

Low potential for bioaccumulation
Polyhydric alcohol

Bioaccumulation is unlikely.

---

**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

*Sea transport (IMDG)*
Non-Regulated
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

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists
Weight percent Components CAS-No.
10 - 30% Polyhydric alcohol
10 - 30% (Pregelatinized) Starch

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

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.