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

Product information

Product Name: Drontal Plus Taste Tabs
MSDS Number: 122000007082

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: brown  Form: tablet  Odour: slight, musty.
Product poses little or no hazard if spilled and no unusual hazard if involved in a fire.

GHS Classification:

Respiratory sensitization : Category 1
Skin sensitization : Category 1
Reproductive toxicity : Category 1B

GHS Label element:

Hazard pictograms :

Signal word : Danger

Hazard statements : H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H360D May damage the unborn child.

Precautionary statements:

Prevention:
P201 Obtain special instructions before use.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves.
P281 Use personal protective equipment as required.

Response:
P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Other hazards which do not result in classification:
None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>Febantel</td>
<td>58306-30-2</td>
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<tr>
<td>8.71%</td>
<td>Pyrantelpamoat</td>
<td>22204-24-6</td>
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<tr>
<td>3%</td>
<td>Praziquantel</td>
<td>55268-74-1</td>
</tr>
<tr>
<td>1 - 5%</td>
<td>Tradesecret</td>
<td></td>
</tr>
<tr>
<td>1 - 5%</td>
<td>Tradesecret</td>
<td></td>
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<tr>
<td>10 - 30%</td>
<td>Polysaccharide</td>
<td></td>
</tr>
<tr>
<td>1 - 5%</td>
<td>Tradesecret</td>
<td></td>
</tr>
</tbody>
</table>

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
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

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:
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:
Storage temperature: < 77 °F (< 25 °C)
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
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</tr>
<tr>
<td>Colour</td>
<td>brown</td>
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<tr>
<td>Odour</td>
<td>slight, musty</td>
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<tr>
<td>Odour Threshold</td>
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</tr>
<tr>
<td>Melting point</td>
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<tr>
<td>Boiling point/boiling range</td>
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<tr>
<td>Density</td>
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<tr>
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<tr>
<td>Vapour pressure</td>
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<td>Viscosity, dynamic</td>
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<tr>
<td>Viscosity, kinematic</td>
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<tr>
<td>Flow time</td>
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<tr>
<td>Surface tension</td>
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<tr>
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<tr>
<td>Partition coefficient</td>
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<td>Solubility(ies)</td>
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<tr>
<td>Flash point</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<tr>
<td>Ignition temperature</td>
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</tr>
<tr>
<td>Explosion limits</td>
<td>No applicable information is available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Conditions to avoid: no data available

Materials to avoid: Oxidizing agents

Hazardous reactions: no data available

Thermal decomposition:

no data available

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

Oxidizing properties:

No statements available.

Impact Sensitivity:

no data available

Further information: The following applies in general to flammable organic substances and preparations: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

11. TOXICOLOGICAL INFORMATION

Other information on toxicity:

Praziquantel
Ingestion of large quantities: Dizziness, Dizziness, Difficulty in breathing, Convulsions, Tiredness

Acute oral toxicity:

Febantel
LD50 rat, female: 1,760 mg/kg
LD50 rat, male: > 10,000 mg/kg

Pyrantel pamoate
LD50 rat: > 24,000 mg/kg
The substance or mixture has no acute oral toxicity

Praziquantel
LD50 rat: 2,840 mg/kg
May be harmful if swallowed.

Tradesecret
LD50 rat: > 2,000 mg/kg
Tradesecret
LD50 rat: > 20,000 mg/kg
The substance or mixture has no acute oral toxicity

Polysaccaride
LD50 rat: > 5,000 mg/kg
The substance or mixture has no acute oral toxicity

Tradesecret
LD50 rat: 4,640 mg/kg

**Acute inhalation toxicity:**
Febantel
LC0 rat: > 2 mg/l
The substance or mixture has no acute inhalation toxicity

Tradesecret
LC50 rat: > 2.2 mg/l, 1 h

Polysaccaride
LC50 rat: > 5.05 mg/l, 4 h
The substance or mixture has no acute inhalation toxicity

**Acute dermal toxicity:**
Febantel
LD50 rabbit: > 2,000 mg/kg
May be harmful in contact with skin.

Praziquantel
Harmful in contact with skin.

Tradesecret
LD50 rabbit: > 5,000 mg/kg

Polysaccaride
LD50 rabbit: > 2,000 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):**
Febantel
LD50 subcutaneous mouse: > 10,000 mg/kg

Tradesecret
LD50 intravenous mouse: 23 mg/kg

**Skin irritation:**
Febantel
rabbit
Result: No skin irritation
Tradesecret rabbit
Result: No skin irritation
Method: Draize Test

Tradesecret rabbit
Result: No skin irritation

Polysaccaride rabbit
Result: No skin irritation

Tradesecret rabbit
Result: Moderate skin irritation

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

Pyrantelpamoat
Result: Causes eye irritation.

Praziquantel
Result: Mild eye irritation

Tradesecret rabbit
Result: No eye irritation
Method: Draize Test

Tradesecret rabbit
Result: No eye irritation

Polysaccaride rabbit
Result: No eye irritation

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

**Sensitisation:**
Pyrantelpamoat
Skin sensitization
Result: Causes sensitization.

Respiratory tract sensitization
Result: Causes sensitization.
Polysaccaride
Skin sensitization guinea pig
Result: Did not cause sensitization on laboratory animals.

**Genotoxicity in vitro:**
Praziquantel
Ames test
Result: negative, No evidence of a gene mutagenic effect.

Tradesecret
Ames test Escherichia coli
Result: negative

Tradesecret
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Polysaccharide
Ames test
Result: negative

Tradesecret
Ames test
Result: negative
Test substance: Data on a comparable substance

**Genotoxicity in vivo:**
Tradesecret

Result: No indication of mutagenic effects.

Polysaccharide
mouse
Result: No indication of mutagenic effects.

**Carcinogenicity:**
Praziquantel
Result: Animal testing did not show any carcinogenic effects.

Tradesecret
Result: No indication on the basis of the available data.

**Reproductive toxicity:**
Result: Studies with pregnant animals have shown an increase in abortion and fetal abnormalities with the combination of febantel and praziquantel.

**Teratogenicity:**
Febantel
Result: May damage the unborn child.

Praziquantel
Result: Did not show teratogenic effects in animal experiments.

**Pharmaceutic effects:**
Febantel
Anthelmintics

Pyrantel pamoate
Anthelmintics

Praziquantel
Anthelmintics

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

**Experience with human exposure:**

**Components:**
112945-52-5:
Prolonged inhalation of fine quartz dust may produce in susceptible persons silicosis. Fine quartz dust has no acute toxicity. Ingestion of fine quartz dust is harmless.

**STOT - single exposure:**
no data available

**STOT - repeated exposure:**
no data available

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### 12. ECOLOGICAL INFORMATION

**General advice:**
Do not allow to enter surface waters or groundwater.

**Toxicity to fish:**

**Febantel**
Acute Fish toxicity: LC0 > 10,000 mg/l
Test species: Danio rerio (zebra fish)  Duration of test: 96 h

**Pyrantel pamoate**
Acute Fish toxicity: LC0 > 60.6 mg/l
Test species: Danio rerio (zebra fish)  Duration of test: 96 h

**Praziquantel**
Acute Fish toxicity: LC50 17 mg/l
Duration of test: 24 h

**Tradesecret**
Acute Fish toxicity: LC50 > 10,000 mg/l
Test species: Danio rerio (zebra fish)  Duration of test: 96 h
Method: OECD 203

**Polysaccharide**
Acute Fish toxicity: LC50 > 100 mg/l
Test species: Oncorhynchus mykiss (rainbow trout)  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:
Febantel
EC50 > 1.8 mg/l
Test species: Daphnia magna (Water flea) Duration of test: 48 h

Pyrantelpamoat
EC50 12.68 mg/l
Test species: Daphnia magna (Water flea) Duration of test: 48 h

Praziquantel
EC0 35 mg/l

EC100 100 mg/l

Tradesecret
EC50 > 10,000 mg/l
Test species: Daphnia magna (Water flea) Duration of test: 48 h
Method: OECD 202

Polysaccaride
LC50 > 100 mg/l
Test species: Daphnia magna (Water flea) Duration of test: 48 h

Toxicity to algae:
Febantel
ErC50 > 0.43 mg/l
tested on: Desmodesmus subspicatus (green algae) Duration of test: 72 h
Method: OECD 201

EbC50 > 0.43 mg/l
tested on: Desmodesmus subspicatus (green algae) Duration of test: 72 h
Method: OECD 201

Praziquantel
Cell multiplication inhibition test EbC50 140 mg/l
tested on: Desmodesmus subspicatus (green algae) Duration of test: 72 h

Cell multiplication inhibition test ErC50 77 mg/l
tested on: Desmodesmus subspicatus (green algae) Duration of test: 72 h

Cell multiplication inhibition test NOEbC 25 mg/l
tested on: Desmodesmus subspicatus (green algae) Duration of test: 72 h

Cell multiplication inhibition test NOErC 25 mg/l
tested on: Desmodesmus subspicatus (green algae) Duration of test: 72 h
Polysaccaride
EC50 > 100 mg/l
Duration of test: 96 h

NOEC 12.5 mg/l
Duration of test: 96 h

**Toxicity to bacteria:**
Febantel
EC50 > 10,000 mg/l
tested on: activated sludge micro-organism
Method: ISO 8192

Praziquantel
EC50 > 1,000 mg/l
Duration of test: 3 h

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

**Biodegradability:**
Pyrantelpmoat
2 %, 28 d Not readily biodegradable.

Praziquantel
0 %, Not readily biodegradable.

Polysaccaride
inherently degradable

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

---

**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
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. (FEBANTEL)
Class 9
Packaging group III
Dangerous goods labels 9
Environmentally hazardous yes

International IMDG
UN Number 3077
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (FEBANTEL)
Class 9
Packaging group III
IMDG-Labels 9
Marine Pollutant yes

15. REGULATORY INFORMATION

Other regulations: No statements available.
US. Toxic Substances Control Act This product is exempt from TSCA under Section 3 (2)(B)(vi) when used for pharmaceutical application.

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

SARA Section 311/312 Hazard Categories Exempt from SARA Section 311/312

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
Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 - 30%</td>
<td>Polysaccaride</td>
<td></td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NFPA 704M Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
</tr>
<tr>
<td>flammability</td>
</tr>
<tr>
<td>reactivity</td>
</tr>
<tr>
<td>other</td>
</tr>
</tbody>
</table>

0=Insignificant  1=Slight  2=Moderate  3=High  4=Extreme

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.