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

Product information

Product Name: Advantage Household Spot & Crevice Spray
MSDS Number: 122000010790

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
Chemetrec: (800) 424-9300
BAYER INFORMATION PHONE:(800) 633-3796
INTERNATIONAL:(703) 527-3887

2. HAZARDS IDENTIFICATION

<table>
<thead>
<tr>
<th>Emergency Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAUTION! Colour: cloudy, off-white  Form: liquid  Odour: sweet.</td>
</tr>
<tr>
<td>Harmful if swallowed.</td>
</tr>
</tbody>
</table>

GHS Classification:

Acute toxicity (Oral) : Category 5

GHS Label element:

Signal word : Warning

Hazard statements : H303 May be harmful if swallowed.

Precautionary statements : Prevention:
P264 Wash hands thoroughly after handling.
Hazard Communication (29CFR 1910.1200)

Skin Contact

Eye Contact

Acute Inhalation Hazards
If misted or handled at elevated temperatures, high concentrations can produce irritation and/or difficulty breathing.

Acute Skin Hazards
May cause skin irritation.

Acute Eye Hazards
May cause slight irritation.

Acute Ingestion Hazards
Expected to be harmful.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5%</td>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
</tr>
</tbody>
</table>

Other Ingredients

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05%</td>
<td>Imidacloprid</td>
<td>138261-41-3</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General advice: Take off all contaminated clothing immediately.

If inhaled: Remove to fresh air. Call a physician immediately.

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:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable extinguishing media:** High volume water jet

**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.

**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:** Cover spilt product with liquid-binding material (sand, silica gel, acid binder, universal binder, hybilat). Take up mechanically and fill into labelled, closable containers.

**Additional advice:** No special precautions required.

**Further Accidental Release Notes**

No special precautions required.

7. HANDLING AND STORAGE

**Handling:**
Industrial uses: Avoid formation of aerosol. Avoid contact with skin, eyes and clothing.

No special protective measures against fire required.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory protection:**
Recommended Filter type: Organic vapor with prefilter

**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: liquid
Colour: cloudy, off-white
Odour: sweet
Odour Threshold: No applicable information is available
Melting point: No applicable information is available
Boiling point/boiling range: No applicable information is available
Density: 0.999 g/cm³ at 68 °F (20 °C)
Bulk density: No applicable information is available
Vapour pressure: No applicable information is available
Viscosity, dynamic: 6 mPa.s at 72.86 °F (22.7 °C)
Viscosity, kinematic: No applicable information is available
Flow time: No applicable information is available
Surface tension: No applicable information is available
Miscibility with water: in all proportions
Water solubility: No applicable information is available
pH: No applicable information is available
Relative density: No applicable information is available
Partition coefficient: No applicable information is available
Solubility(ies): No applicable information is available
Flash point: > 199.94 °F (> 93.3 °C) closed cup
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: 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:
No data is available on the product itself.

Acute oral toxicity:
LD50 rat : 3,129 mg/kg

Acute inhalation toxicity:
LC50  > 2.09 mg/l, 4 h

Acute dermal toxicity:
LD50  > 5,000 mg/kg
The substance or mixture has no acute dermal toxicity

Skin irritation:
Result: Mild skin irritation

Eye irritation:
rabbit
Result: No eye irritation

Sensitisation:
Result: Causes sensitization.

Genotoxicity in vitro:
Imidacloprid
Ames test
Result: negative

In vitro tests did not show mutagenic effects

Genotoxicity in vivo:
Imidacloprid
Result: No indication of mutagenic effects., No evidence of a genotoxic effect.

Carcinogenicity:
Imidacloprid
Result: Animal testing did not show any carcinogenic effects.
Reproductive toxicity:
Imidacloprid
Result: Animal studies have produced no evidence of toxic effects on reproduction.

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

Pharmaceutic effects:
Imidacloprid
Insecticide

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

STOT - single exposure:
nodata available

STOT - repeated exposure:
nodata available

12. ECOLOGICAL INFORMATION

General advice:
Do not allow to enter surface waters or groundwater. No data is available on the product itself.

Toxicity to fish:
Distillates (petroleum), hydrotreated light
Acute Fish toxicity: LC50 > 1,000 mg/l
Test species: Salmo gairdneri Duration of test: 96 h

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:
Distillates (petroleum), hydrotreated light
EC50 > 1,000 mg/l
Duration of test: 48 h

Imidacloprid
EC50 0.055 mg/l
Test species: Hyalella azteca Duration of test: 96 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

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

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 3082
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (D-PHENOTHHRIN)
Class 9
Packaging group III
Dangerous goods labels: 9
Environmentally hazardous: yes

International IMDG
UN Number: 3082
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (D-PHENOTHIRIN)
Class: 9
Packaging group: III
IMDG-Labels: 9
EmS Number: F-A
Marine Pollutant: yes

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

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

HMIS Rating

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td></td>
</tr>
</tbody>
</table>

0=Minimal  1=Slight  2=Moderate  3=Serious  4=Severe
* = Chronic Health Hazard
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.