

## **SAFETY DATA SHEETS**

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

078926847

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

078557442 078557459 078557467 078557475 078912666 078912667 078912671 078926846 078926848

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

078912668 078912669

## SAFETY DATA SHEET

122000001555

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

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

**Product Name:** Advantage multi for Dogs  
**Synonyms:** Advantage  
**SDS Number:** 122000001555

**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**

**Colour:** yellow, brownish, clear **Form:** liquid **Odour:** weak, characteristic.

**GHS Classification:**

**Eye irritation** : Category 2  
**Acute toxicity (Oral)** : Category 4  
**Acute toxicity (Inhalation)** : Category 4

**GHS Label element:**

**Hazard pictograms** : 

**Signal word** : **Warning**

**Hazard statements** : **H302 + H332 Harmful if swallowed or if inhaled**

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

**H319 Causes serious eye irritation.****Precautionary statements****: Prevention:****P261** Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.**P273** Avoid release to the environment.**P280** Wear protective gloves/ eye protection/ face protection.**Response:****P312** Call a POISON CENTER or doctor/ physician if you feel unwell.**P337 + P313** If eye irritation persists: Get medical advice/ attention.**P391** Collect spillage.**3. COMPOSITION/INFORMATION ON INGREDIENTS****Hazardous Ingredients:**

Weight percent	Components	CAS-No.
10 - 30%	Carbonate derivative	
60 - 100%	Alcohol derivative	
9.11%	Imidacloprid	138261-41-3

**Other Ingredients**

Weight percent	Components	CAS-No.
0.8645%	Moxidectin	113507-06-5

**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

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

**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: Hydrogen cyanide (hydrocyanic acid) Hydrogen chloride gas Nitrogen oxides (NOx) Carbon oxides

**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. Use adequate ventilation.

**Methods for cleaning up:** Suppress (knock down) gases/vapours/mists with a water spray jet. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Place in closed containers. Label for proper disposal.

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

**Further Accidental Release Notes**      No special precautions required.

---

**7. HANDLING AND STORAGE****Handling:**

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

**No special protective measures against fire required.**

**Storage:**

Storage temperature: 39 - 77 °F (3.89 - 25 °C)

---

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Benzyl alcohol (100-51-6)**

US. OARS. WEELs Workplace Environmental Exposure Level Guide  
Time Weighted Average (TWA): 10 ppm, 44.20 mg/m3

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

**Respiratory protection:**

Recommended Filter type: Organic vapor with prefilter

None required for consumer use of this product.

**Hand protection:**

Chemically resistant gloves.

None required for consumer use of this product.

**Eye protection:**

Safety glasses

None required for consumer use of this product.

**Other protective measures:**

Wear suitable protective equipment.

Please consult label for end-user requirements.

---

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form:	liquid	
Colour:	yellow, brownish, clear	
Odour:	weak, characteristic	
Odour Threshold:	No applicable information is available	
Melting point:	No applicable information is available	
Boiling point/boiling range:	No applicable information is available	
Density:	1.098 g/cm <sup>3</sup> at 68 °F (20 °C)	DIN 51757
Bulk density:	No applicable information is available	
Vapour pressure:	No applicable information is available	
Viscosity, dynamic:	No applicable information is available	
Viscosity, kinematic:	No applicable information is available	
Flow time:	No applicable information is available	
Surface tension:	No applicable information is available	
Miscibility with water:	immiscible	
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:	> 212 °F (> 100 °C)	
Flammability (solid, gas):	No applicable information is available	
Ignition temperature:	No applicable information is available	
Explosion limits:	No applicable information is available	

---

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

**10. STABILITY AND REACTIVITY**

**Conditions to avoid:** Do not allow product to come in contact with:  
Heat

**Materials to avoid:** Oxidizing agents

**Hazardous reactions:** Exothermic polycondensation, accompanied by setting-free of water, may occur in the presence of acids and dissolved iron, zinc or aluminium.

**Thermal decomposition:**

No data available

**Hazardous decomposition products:**

Hydrogen cyanide (hydrocyanic acid), Hydrogen chloride gas, Nitrogen oxides (NO<sub>x</sub>), Carbon oxides

**Oxidizing properties:**

No statements available.

**Impact sensitivity:**

No data available

---

**11. TOXICOLOGICAL INFORMATION**

**Other information on toxicity:**

Alcohol derivative

Dermal absorption possible

If inhaled: irritations, Shortness of breath, Cough

If swallowed: Vomiting, Nausea, Irritation of mucous membranes in the mouth, throat, gullet and gastro-intestinal tract after swallowing.

Systemic toxicity headaches, Nausea, CNS disorders, Convulsions, Unconsciousness, cessation of breathing

**Acute oral toxicity:**

Acute toxicity estimate (ATE) 1,105 mg/kg

Harmful if swallowed.

Method: Calculation method

Calculated for GHS Classification and Labelling.

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

**Acute inhalation toxicity:**

Acute toxicity estimate (ATE) 14.25 mg/l

Harmful if inhaled.

Method: Calculation method

Calculated for GHS Classification and Labelling.

**Acute dermal toxicity:**

Imidacloprid

LD50 Rat: &gt; 5,000 mg/kg

The substance or mixture has no acute dermal toxicity

Moxidectin

LD50 Rabbit: &gt; 2,000 mg/kg

LD50 Rat: &gt; 2,000 mg/kg

May be harmful in contact with skin.

Carbonate derivative

LD50 Rabbit: &gt; 20,000 mg/kg

The substance or mixture has no acute dermal toxicity

Alcohol derivative

LD50 Rabbit: &gt; 2,000 mg/kg

May be harmful in contact with skin.

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

Moxidectin

LD50 intraperitoneal Rat: 394 mg/kg

LD50 intraperitoneal Mouse: 86 mg/kg

LD50 subcutaneous Rat: &gt; 640 mg/kg

LD50 subcutaneous Mouse: 86 mg/kg

**Skin irritation:**

Imidacloprid

Rabbit

Result: No skin irritation

Moxidectin

Result: Moderate skin irritation

Carbonate derivative

Rabbit

Result: No skin irritation

Method: OECD 404

Alcohol derivative

Rabbit

Result: No skin irritation

Method: OECD 404

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

**Eye irritation:**

Imidacloprid

Rabbit

Result: No eye irritation

Moxidectin

Result: Moderate eye irritation

Carbonate derivative

Rabbit

Result: Causes eye irritation.

Method: OECD 405

Alcohol derivative

Rabbit

Result: No eye irritation

Method: OECD 405

**Sensitisation:**

Imidacloprid

Skin sensitization guinea pig

Result: Did not cause sensitisation on laboratory animals.

Method: Magnusson and Kligmann maximization test

Carbonate derivative

Result: Does not cause skin sensitisation.

Alcohol derivative

guinea pig

Result: Did not cause sensitisation on laboratory animals.

Method: Magnusson and Kligmann maximization test

**Subacute, subchronic and prolonged toxicity:**

Alcohol derivative

NOEL 400 mg/kg, Rat, Exposure time 90-day

**Genotoxicity in vitro:**

Imidacloprid

Ames test

Result: negative

In vitro tests did not show mutagenic effects

Moxidectin

Result: No evidence of a gene mutagenic effect.

Alcohol derivative

Ames test

Result: negative

**Genotoxicity in vivo:**

Imidacloprid

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



**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

Carbonate derivative

Result: No indication of mutagenic effects.

Alcohol derivative

Result: No indication of mutagenic effects.

**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.

Moxidectin

Suspected of damaging fertility. Suspected of damaging the unborn child.

Alcohol derivative

Result: Did not show teratogenic effects in animal experiments.

**Pharmaceutic effects:**

Imidacloprid

Insecticide

Moxidectin

Anthelmintics Antiparasitic agent

**Carcinogenicity:**

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

**STOT - single exposure:****Components:****100-51-6 :**

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

**STOT - repeated exposure:****Components:****100-51-6 :**

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

**138261-41-3 :**

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

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

**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

Moxidectin

Acute Fish toxicity: LC50 16 µg/l

Test species: Oncorhynchus mykiss (rainbow trout)

LC50 62 µg/l

Test species: Lepomis macrochirus (Bluegill)

Carbonate derivative

static test: LC50 ca. 5,300 mg/l

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

Method: DIN 38412

Alcohol derivative

Acute Fish toxicity: LC50 10 mg/l

Test species: Lepomis macrochirus (Bluegill) Duration of test: 96 h

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

Imidacloprid

EC50 0.055 mg/l

Test species: Hyalella azteca Duration of test: 96 h

Moxidectin

EC50 302 ng/l

Test species: Daphnia magna (Water flea)

Carbonate derivative

static test EC50 > 500 mg/l

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

Alcohol derivative

EC50 55 mg/l

Test species: Daphnia magna (Water flea) Duration of test: 24 h

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

**Toxicity to algae:**

Imidacloprid

EC50 &gt; 100 mg/l

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

EC50 &gt; 10 mg/l

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

Moxidectin

EC50 &gt; 869 µg/l

Carbonate derivative

static test &gt; 500 mg/l

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

Method: DIN 38412

Alcohol derivative

IC50 &gt; 100 mg/l

Duration of test: 72 h

**Toxicity to bacteria:**

Imidacloprid

EC50 &gt; 10,000 mg/l

tested on: activated sludge micro-organism

Method: OECD 209

Carbonate derivative

EC20 &gt; 800 mg/l

tested on: activated sludge micro-organism

Duration of test: 0.5 h

Method: ISO 8192

Alcohol derivative

EC50 71.4 mg/l

tested on: Photobacterium phosphoreum

Duration of test: 0.5 h

**Biodegradability:**

Carbonate derivative

rapidly biodegradable

Alcohol derivative

92 - 96 %, 28 d rapidly biodegradable

Method: OECD 301 C

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

**Bioaccumulation:**

Imidacloprid

Low potential for bioaccumulation

Carbonate derivative

Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

---

**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.  
(MOXIDECTIN)

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,

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

	N.O.S. (MOXIDECTIN)
<b>Class</b>	9
<b>Packaging group</b>	III
<b>IMDG-Labels</b>	9
<b>EmS Number</b>	F-A
<b>Marine pollutant</b>	yes

---

**15. REGULATORY INFORMATION**

**US. Toxic Substances Control Act** This product is excluded from TSCA regulation by Section 3 (2)(B)(vi) when used for FDA 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** Immediate Health Hazard

**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.
60 - 100%	Alcohol derivative	

**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.

**Advantage multi for Cats or Dogs**

Version 2.0

Revision Date 08/24/2015

---

**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.