



SAFETY DATA SHEET

A18137/08/AUS

ADVANTAGE FOR DOGS AND CATS

SECTION 1 – IDENTIFICATION, CONTACTS

Bayer Australia Ltd
875 Pacific Highway
Pymble NSW 2073

In case of emergency: 1800 033 111

24 hour Emergency Service Australia Wide, Toll Free

Contact Point (for non-emergency calls)

Animal Health Division **Phone:** (02) 9391-6000

Product Name

Advantage for Dogs and Cats

Product Use

Spot-on insecticide for flea control in dogs and cats.

Other Names

Imidacloprid, benzyl alcohol

This SDS covers the following six products:

- Advantage for Kittens and Small Cats up to 4kg
- Advantage for Cats over 4kg
- Advantage for Puppies and Small Dogs up to 4 kg
- Advantage for Dogs 4-10kg
- Advantage for Dogs 10-25kg
- Advantage for Dogs over 25kg

Creation Date

25 June 2003

Revision Date

23 November 2015 (SDS is current for 5 years from this date)

SECTION 2 – HAZARD IDENTIFICATION

Hazard Classification	<p>HAZARDOUS SUBSTANCE</p> <p>NOT CLASSIFIED AS DANGEROUS GOODS when transported by road or rail within Australia under Special Provision AU01 of the Australian Dangerous Goods Code, 7th Edition.</p> <p>CLASSIFIED AS DANGEROUS GOODS when transported by sea or air.</p>
GHS-Classification	<p>Acute toxicity, Oral, Category 4 (H302) Acute toxicity, Inhalation, Category 4 (H332) Eye irritation, Category 2 (H319) Hazardous to the aquatic environment, Category 1 (H400) Hazardous to the aquatic environment, Category 1 (H410)</p>
Signal Word	WARNING
Hazard Statements	<p>H302 + H332 Harmful if swallowed or if inhaled</p> <p>H319 Causes serious eye irritation.</p>
Precautionary statements	<p>Prevention: P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection.</p> <p>Response: P312 Call Poisons Information 131 126 or doctor/ physician if you feel unwell. P337 + P313 If eye irritation persists: Get medical advice/ attention. P391 Collect spillage.</p>

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous
Components

Imidacloprid

Concentration [Weight percent] $\geq 2.5 - < 10$

CAS-No.: 138261-41-3

CAS name: 2-Imidazolidinimine, 1-((6-chloro-3-pyridinyl)methyl)-N-nitro

GHS Classification:

Acute Tox. 4 H302

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

Also contains:**Benzyl alcohol**

Concentration [Weight percent] $\geq 50 - \leq 100$

CAS-No.: 100-51-6

CAS name: Benzenemethanol

GHS Classification:

Acute Tox. 4 H332

Acute Tox. 4 H302

Propylene carbonate

Concentration [Weight percent] $\geq 10 - < 20$

CAS-No.: 108-32-7

CAS name: 1,3-Dioxolan-2-one, 4-methyl-

GHS Classification:

Eye Irrit. 2 H319

SECTION 4 – FIRST AID MEASURES

Label Regulated First
Aid Statement

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.

General

Remove victim from contaminated area. If there is a risk of unconsciousness, position and transport in a stable lateral position. Remove soiled or soaked clothing immediately.

Scheduled Poisons

Poisons Information Centres in each State capital city can provide additional assistance for scheduled poisons. Phone 131126.

Inhalation

Harmful by inhalation. After inhalation remove from exposure and perform artificial respiration if necessary.

Skin contact

Remove contaminated clothing. Wash affected area immediately with soap and water. Seek medical attention if required.

Eye contact

Irritating to the eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion

Harmful if swallowed. If vomiting occurs keep head lower than hips to help prevent aspiration. Seek medical attention if required.

Advice to doctor

Imidacloprid is a chloronicotinyl compound (syn. neonicotinoid). There is no specific antidote. Apply basic first aid and decontamination procedures. The formulation is extremely bitter and unlikely to be swallowed in significant quantity.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media	Sprayed water jet, foam, dry powder, CO ₂ , sand
Fire and Explosion Hazards	Combustible liquid - Class C1.
Hazardous Combustion Products	Thermal decomposition products include hydrogen chloride, hydrogen cyanide, carbon monoxide, and nitrogen oxides.
Fire Fighting	<p>Fight fire in the early stages if safe to do so. Wear respiratory protection.</p> <p>In well ventilated areas wear full face mask with a combination filter. (Offers no protection from carbon monoxide)</p> <p>In enclosed premises: respirator with independent air supply.</p> <p>Contain firefighting water.</p>

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Accidental Release	<p>Use any personal protective equipment listed in Chapter 8.</p> <p>Prevent spillage from spreading or entering soil, waterways and drains.</p> <p>Take up with absorbent material such as sawdust, peat or chemical binder. Fill material along with any contaminated soil etc., into sealable containers. Clean affected area with aqueous detergent and a small amount of water. Absorb this detergent/water with absorbent material. Place cleaning materials into the same container.</p> <p>Do not eat, drink or smoke during clean-up operation.</p> <p>Do not breathe vapour/spray.</p>
--------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SECTION 7 – HANDLING AND STORAGE

Safe Handling	During normal use the packaging ensures safe handling. Follow instructions on the product label.
Storage	<p>Keep out of reach of children.</p> <p>Store away from food, drink or animal feeding stuffs.</p> <p>To maintain product quality, store below 30°C.</p> <p>Protect from temperatures below 0°C and above 50°C.</p> <p>Keep away from heat or moisture.</p> <p>This material is a Schedule 5 poison and must be stored, handled and used in accordance with the relevant regulations.</p>

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits	No exposure allocated for imidacloprid. No exposure allocated for other ingredients.
Ventilation	No ventilation is required under normal conditions of use.
Eye Protection	Avoid contact with eyes. No eye protection is required under normal conditions of use. Under other conditions of use wear safety goggles
Skin Protection	Avoid contact with skin. No skin protection is required under normal conditions of use. Under other conditions of use wear rubber gloves. Wash hands before breaks and at end of work.
Respirator	Do not inhale vapour. No respirator is required under normal conditions of use.
Protective Material Types	Rubber, latex.
General Advice	Avoid contact with eyes or skin. Clean working clothes and protective equipment with soap and water. Change badly soiled or soaked clothing. Wash hands before breaks and at the end of work. If product is splashed on skin, immediately wash area with soap and water. When using do not eat, drink, or smoke.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Physical State	Liquid
Colour	Clear, yellow to brown
Odour	Weak characteristic odour
Boiling Point	207°C at 1013 kPa
Solidifying Range	Not available
Density	1.093-1.103 kg/L at 20°C
Vapour Pressure	2 kPa at 20°C
Viscosity	No statements available
Solubility in Water	No statements available
pH	ca. 6.4 at 10 g/L (20 °C)
Flash Point	98.9 °C
Ignition Temperature	415°C
Explosive Limits	No statements available
Other Information	The product is packaged in individual, single dose tubes of 0.4 to 4.0 ml capacity. The tubes are packed in blister pack trays of 1, 4 or 6 tubes per tray. The product is therefore well protected from accidental release.

SECTION 10 – STABILITY & REACTIVITY

Chemical Stability	Product is stable. No hazardous reactions.
Conditions to Avoid	Avoid strong oxidising agents.
Incompatible Materials	No statements available.
Hazardous Decomposition	Thermal decomposition products include hydrogen cyanide, carbon monoxide, and nitrogen oxides.
Hazardous Reactions	Will not polymerise.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity	Oral LD ₅₀ (rat) 1732-1943 mg/kg (of formulation) Dermal LD ₅₀ (rat) >2000 mg/kg (of formulation) Inhalation LC ₅₀ (rat) >2,415 mg/L (4h) (of formulation)
Local Effects	Eye: Causes eye irritation Skin: Mildly irritating to the skin of rabbits. Moderately irritating to the mucous membranes of rabbits. Non skin sensitising.
Reproductive Effects	None of the ingredients of the formulation have been shown to produce reproductive or teratogenic effects.
Mutagenicity	None of the ingredients of the formulation have been shown to produce mutagenic or genotoxic effects.
Carcinogenic Effects	Imidacloprid has been shown in animal tests to have no carcinogenic potential. Other ingredients are not classified as carcinogens

SECTION 12 – ECOLOGICAL INFORMATION

Octanol/Water Partition Co-efficient	K _{ow} logP = 0.57 at 21°C (imidacloprid)
Ecotoxicity	Fish toxicity Imidacloprid Spot On 10% >105 ppm <i>Lepomis macrochirus</i> (Bluegill) Imidacloprid LC ₅₀ 237 mg/L (96h) Golden orfe (<i>Leuciscus idus</i>) LC ₅₀ 211 mg/L (96h) Rainbow trout (<i>Oncorhynchus mykiss</i>) LC ₅₀ 280 mg/L (96h) Carp (<i>Cyprinus carpio</i>) Benzyl alcohol LC ₅₀ 10 mg/l (96hr) Bluegill (<i>Lepomis macrochirus</i>) LC ₅₀ 646 mg/L (48h) Golden orfe (<i>Leuciscus idus</i>) LC ₅₀ 460 mg/L (96h) (<i>Pimephales promelas</i>) Propylene carbonate LC ₅₀ 5300 mg/L (96h) Golden orfe (<i>Leuciscus idus</i>)

SECTION 12 – ECOLOGICAL INFORMATION (continued)

Ecotoxicity (continued)

Daphnia toxicity

Imidacloprid

EC₅₀ 0.055 mg/L (96h) *Hyalella azteca*EC₅₀ 85 mg/L (48h) Water flea (*Daphnia magna*)

benzyl alcohol

EC₅₀ 55 mg/L (24hr) Water flea (*Daphnia magna*)

Propylene carbonate

EC₅₀ 500 mg/L (48hr) Water flea (*Daphnia magna*)**Algal toxicity**

Imidacloprid

EC₅₀ > 100 mg/l (72hr) *Pseudokirchneriella subcapitata* (green algae)EC₅₀ > 10 mg/l (72hr) *Desmodesmus subspicatus* (green algae)

Benzyl alcohol

IC₅₀ 100mg/L (72h)

Propylene carbonate

Static test > 500 mg/l (72hr) *Desmodesmus subspicatus* (green algae)**Bacterial toxicity**

Imidacloprid

EC₅₀ > 10,000 mg/l Activated sludge micro-organism

Benzyl alcohol

EC₅₀ 71.4 mg/l (0.5hr) *Photobacterium phosphoreum*

Propylene carbonate

EC₂₀ > 800 mg/l (0.5hr) Activated sludge micro-organism

Abiotic Degradation

Imidacloprid

t_{1/2} >1 yr at pH 5 (25°C)t_{1/2} >1 yr @ pH 7 (25°C)t_{1/2} approx 1 yr @ pH 9 (25°C)**SECTION 13 – DISPOSAL INFORMATION**

After Intended Use

Dispose of used applicators by wrapping in paper and placing in garbage

After spill or accident

Dispose of sealed containers at an approved local waste disposal site.

SECTION 14 – TRANSPORT INFORMATION

UN No	3082
UN Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Imidacloprid).
Class & Subsidiary Risk	9
Packaging Group	III
Hazchem Code	3Z
Special Note	NOT CLASSIFIED AS DANGEROUS GOODS when transported by road or rail within Australia under Special Provision AU01 of the Australian Dangerous Goods Code, 7th Edition. CLASSIFIED AS DANGEROUS GOODS when transported by sea or air.

SECTION 15 – REGULATORY INFORMATION

Poisons Schedule	Schedule 5
APVMA Registration	These products are registered by the APVMA.
Registration Numbers	50395, 50396, 50397, 50398, 50399, 50400.
Labelling	All necessary directions, precautions and warnings for normal use of the product are included on the product label.

SECTION 16 – OTHER INFORMATION

Summary of Changes
from Last Edition

GHS update

Acronyms

ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail

APVMA Australian Pesticides and Veterinary Medicines Authority

CAS Chemical Abstracts Service Registry Number

GHS Globally Harmonized System of Classification and Labelling of Chemicals

HDPE High density polyethylene

LDPE Low density polyethylene

OECD Organisation for Economic Co-operation and Development

STOT Specific Target Organ Toxicity

SUSDP Standard for the Uniform Scheduling of Drugs and Poisons

TWA Time Weighted Average – average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

UN Number United Nations Number

Disclaimer

This Safety Data Sheet has been developed according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Third Revised Edition. United Nations, 2009. The data, information and recommendations herein ("information") are represented in good faith and believed to be correct as of the date hereof. The purpose of this Safety Data Sheet is to describe product in terms of their safety requirements. Bayer Australia Limited makes no representation of merchantability, fitness for a particular purpose or application, or of any other nature with respect to the information or the product to which the information refers ("the product"). The information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use of the product. The physical data shown herein are typical values based on material tested. These values should not be construed as a guaranteed analysis of any specific lot or as guaranteed specification for the product or specific lots thereof. Due care should be taken to make sure that the use or disposal of this product and / or its packaging is in compliance with relevant Federal, State and Local Government regulations.

END OF SDS