



## SAFETY DATA SHEET

A18189/06/AUS

## ADVANTIX FOR DOGS

SECTION 1 – IDENTIFICATION, CONTACTS	
<p>Bayer Australia Ltd 875 Pacific Highway Pymble NSW 2073</p>	<p><b>In case of emergency: 1800 033 111</b> 24 hour Emergency Service Australia Wide, Toll Free <b>Contact Point (for non-emergency calls)</b> Animal Health Division <b>Phone:</b> (02) 9391-6000</p>
<p>Product Name</p>	<p><b>Advantix for Dogs</b></p>
<p>Product Use</p>	<p>Spot-on insecticide for tick and flea control in dogs.</p>
<p>Other Names</p>	<p>Imidacloprid, permethrin, N-methylpyrrolidone This SDS covers the following four products:</p> <ul style="list-style-type: none"> <li>• Advantix for Puppies and Small Dogs up to 4 kg</li> <li>• Advantix for Dogs 4-10kg</li> <li>• Advantix for Dogs 10-25kg</li> <li>• Advantix for Dogs over 25kg</li> </ul>
<p>Creation Date</p>	<p>24<sup>th</sup> July 2003</p>
<p>Revision Date</p>	<p>24 November 2015 (SDS is current for 5 years from this date)</p>

**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><b>Acute toxicity, Oral, Category 4 (H302)</b>  <b>Eye irritation, Category 2 (H319)</b>  <b>Reproductive toxicity, Category 1B (H360D)</b>  <b>Specific target organ toxicity - single exposure, Category 3 (H335)</b>  <b>Hazardous to the aquatic environment, Category 1 (H400)</b>  <b>Hazardous to the aquatic environment, Category 1 (H410)</b></p>
Signal Word	<b>DANGER</b>
Hazard Statements	<p><b>H302 Harmful if swallowed.</b>  <b>H319 Causes serious eye irritation.</b>  <b>H335 May cause respiratory irritation.</b>  <b>H360D May damage the unborn child.</b>  <b>H410 Very toxic to aquatic life with long lasting effects</b></p>
Precautionary statements	<p><b>Prevention:</b>  P201 Obtain special instructions before use.  P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  P273 Avoid release to the environment.  P280 Wear protective gloves/ eye protection/ face protection.  P281 Use personal protective equipment as required.</p> <p><b>Response:</b>  P308 + P313 IF exposed or concerned: Get medical advice/ attention.</p>

**SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous  
Components

**Permethrin**

Concentration [Weight percent]  $\geq 25 - < 50$

CAS-No.: 52645-53-1

CAS name: M-Phenoxybenzyl-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylat

GHS Classification:

Acute Tox. 4 H332

Acute Tox. 4 H302

Skin Sens. 1 H317

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

**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:****1-Methyl-2-pyrrolidone**

Concentration [Weight percent]  $\geq 25 - < 50$

CAS-No.: 872-50-4

CAS name: 2-Pyrrolidinone, 1-Methyl-

GHS Classification:

Repr. 1B H360D

Eye Irrit. 2 H319

STOT SE 3 H335

Skin Irrit. 2 H315

**Citric acid**

Concentration [Weight percent] 0.09

CAS-No.: 77-92-9

CAS name: 1,2,3-Propanetricarboxylic acid, 2-hydroxy-

GHS Classification:

Eye Irrit. 2 H319

<b>SECTION 4 – FIRST AID MEASURES</b>	
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	<p>Imidacloprid is a chloronicotinyl compound (syn. neonicotinoid). There is no specific antidote. Apply basic aid and decontamination procedures. The formulation is extremely bitter and unlikely to be swallowed in significant quantity.</p> <p>Permethrin and like Type I pyrethroids affect the voltage-gated sodium channels in vertebrates and non-vertebrates. Type I pyrethroids effects are generated largely by action on the central nervous system but can produce important local effects such as temporary paraesthesia</p>

<b>SECTION 5 – FIRE FIGHTING MEASURES</b>	
Extinguishing Media	Sprayed water jet, foam, dry powder, CO <sub>2</sub> , sand.
Fire and Explosion Hazards	Non combustible material. Outer packaging may burn.
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. Contain firefighting water.</p>

<b>SECTION 6 – ACCIDENTAL RELEASE MEASURES</b>	
Accidental Release	<p>Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent spillage from spreading or entering soil, waterways and drains. Do not breathe vapour/spray.</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>
<b>SECTION 7 – HANDLING AND STORAGE</b>	
Safe Handling	<p>During normal use the packaging ensures safe handling. Follow instructions on the product label.</p>
Storage	<p>Keep out of reach of children. Store away from food, drink or animal feeding stuffs. To maintain product quality, store below 30°C. 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>
<b>SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION</b>	
Exposure Limits	<p><b>N-methyl-2-pyrrolidone:</b>  Time Weighted Average: 25ppm (103mg/m<sup>3</sup>)  Short Term Exposure Limit: 75ppm (309mg/m<sup>3</sup>)</p> <p>No exposure limits allocated for other ingredients.</p>
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.
Respirator	Do not inhale vapour.
Protective Material Types	Rubber or latex gloves.
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.

<b>SECTION 9 – PHYSICAL &amp; CHEMICAL PROPERTIES</b>	
Physical State	Liquid
Colour	Clear, yellow to brown
Odour	Slight characteristic smell
Boiling Point	199°C
Solidifying Range	Not available
Density	1.123-1.136 kg/L at 20°C
Vapour Pressure	4 x 10 <sup>-12</sup> hPa at 20°C (imidacloprid) <1 x 10 <sup>-6</sup> mm Hg at 20°C (permethrin)
Viscosity	No statements available.
Solubility in Water	Immiscible
pH	3.0-5.0
Flash Point	92.8°C
Ignition Temperature	No statements available
Explosive Limits	1-Methyl-2-pyrrolidone: upper: 9.5 %(V) lower: 1.3 %(V)
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.

<b>SECTION 10 – STABILITY &amp; REACTIVITY</b>	
Chemical Stability	Product is stable. No hazardous reactions.
Conditions to Avoid	Avoid strong oxidising agents. Do not allow product to come in contact with heat.
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	<p>Oral LD<sub>50</sub> (rat): 1 660 mg/kg (of formulation)</p> <p>Dermal LD<sub>50</sub> (rat) &gt;2000 mg/kg (of formulation) The substance or mixture has no acute dermal toxicity.</p> <p>Inhalation LC<sub>50</sub> (rat): &gt;3.5 mg/L aerosol, (4h) (of formulation). The substance or mixture has no acute inhalation toxicity</p>
Local Effects	<p>Eye: moderately irritating to the eye of rabbits</p> <p>Skin (rabbit) no irritation. Non skin sensitising. Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. These sensations cause no lesions and are of a transitory nature (max. 24 hours).</p>
Reproductive Effects	Animal studies have produced no evidence of toxic effects on reproduction.
Mutagenicity	Animal studies have produced no evidence of harmful effects on development. In vitro tests did not show mutagenic effects.
Carcinogenic Effects	Animal testing did not show any carcinogenic effects.

SECTION 12 – ECOLOGICAL INFORMATION	
Octanol/Water Partition Co-efficient	<p>K<sub>ow</sub> logP = 0.57 at 21°C (Imidacloprid)</p> <p>K<sub>ow</sub> logP = 5.95 (Permethrin)</p> <p>K<sub>ow</sub> logP = -0.46 (1-Methyl-2-pyrrolidone)</p>
Ecotoxicity	<p><b>1-Methyl-2-pyrrolidone</b> Acute aquatic toxicity: This product has no known ecotoxicological effects.</p> <p><b>Imidacloprid</b> Acute aquatic toxicity: Very toxic to aquatic life. Chronic aquatic toxicity: Very toxic to aquatic life with long lasting effects.</p> <p><b>Fish toxicity</b> Imidacloprid LC<sub>50</sub> 237 mg/L (96h) Golden orfe (<i>Leuciscus idus</i>) LC<sub>50</sub> 211 mg/L (96h) Rainbow trout (<i>Oncorhynchus mykiss</i>) LC<sub>50</sub> 280 mg/L (96h) Carp (<i>Cyprinus carpio</i>) Permethrin LC<sub>50</sub> 0.0076 mg/l (48h) <i>Poecilia reticulata</i> 1-Methyl-2-pyrrolidone LC<sub>50</sub> &gt; 500 mg/l (96hr) <i>Leuciscus idus</i> (Golden orfe)</p>

<b>SECTION 12 – ECOLOGICAL INFORMATION (cont.)</b>	
Ecotoxicity (cont.)	<p><b>Toxicity to daphnia and other aquatic invertebrates:</b>            imidacloprid            EC<sub>50</sub> 0.055 mg/L (48h) <i>Hyalella azteca</i>            EC<sub>50</sub> 85 mg/L (48h) Water flea (<i>Daphnia magna</i>)            permethrin            EC<sub>50</sub> 0.37 µg/L (48h) Water flea (<i>Daphnia magna</i>)            EC<sub>50</sub> 0.17 µg/L (48h) Water flea (<i>Daphnia magna</i>)</p> <p><b>Algal toxicity</b>            imidacloprid            IC<sub>50</sub> &gt;100 mg/L (72h) Green algae (<i>Pseudokirchneriella subcapitata</i>)            IC<sub>50</sub> &gt;10mg/L (72h) Green algae (<i>Desmodesmus subspicatus</i>)</p> <p><b>Bacterial toxicity</b>            imidacloprid            EC<sub>50</sub> &gt;10,000 mg/L Activated sludge</p>

<b>SECTION 13 – DISPOSAL INFORMATION</b>	
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.

<b>SECTION 14 – TRANSPORT INFORMATION</b>	
UN No	3082
UN Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Permethrin, Imidacloprid, N-Methylpyrrolidone)
Class & Subsidiary Risk	9
Packaging Group	III
Hazchem Code	3Z
Special Note	<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>



**SECTION 15 – REGULATORY INFORMATION**

Poisons Schedule	Schedule 5
APVMA Registration No.	58259, 58260, 58261, 58262

**SECTION 16 – OTHER INFORMATION**

Summary of Changes	GHS update
Acronyms	<p><b>ADG</b> Code Australian Code for the Transport of Dangerous Goods by Road and Rail</p> <p><b>APVMA</b> Australian Pesticides and Veterinary Medicines Authority</p> <p><b>CAS</b> Chemical Abstracts Service Registry Number</p> <p><b>GHS</b> Globally Harmonized System of Classification and Labelling of Chemicals</p> <p><b>HDPE</b> High density polyethylene</p> <p><b>LDPE</b> Low density polyethylene</p> <p><b>STOT</b> Specific Target Organ Toxicity</p> <p><b>SUSDP</b> Standard for the Uniform Scheduling of Drugs and Poisons</p> <p><b>TWA</b> 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.</p> <p><b>UN Number</b> United Nations Number</p>
Disclaimer	<p>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.</p>

**END OF SDS**