



# MATERIAL SAFETY DATA SHEET

## BAYER HEALTHCARE LLC

Animal Health Division  
12707 Shawnee Mission Parkway  
(West 63rd)  
Shawnee, KS 66216-1846

### TRANSPORTATION EMERGENCY

CALL CHEMTREC..... : (800) 424-9300  
INTERNATIONAL ..... : (703) 527-3887

### NON-TRANSPORTATION

BAYER EMERGENCY PHONE : (800) 422-9874  
BAYER INFORMATION PHONE: (800) 633-3796

### Section 1: Product and Company Identification

**Product Name:** K9 Advantix II  
**Material Number:** 83000628  
**EPA Registration Number:**  
**Chemical Family:**  
**Chemical Name:**  
**Formula:**

### Section 2: Composition/Information on Ingredients

#### HAZARDOUS INGREDIENTS

<u>Ingredient Name/ CAS Number</u>	<u>Exposure Limits</u>	<u>Concentration</u>	
		<u>Min.</u>	<u>Max.</u>
Permethrin 52645-53-1	<b>OSHA (PEL):</b> Not Established <b>ACGIH (TLV):</b> Not Established	30%	60%
Amine Derivative CAS# is a trade secret	<b>OSHA (PEL):</b> Not Established <b>ACGIH (TLV):</b> Not Established	30%	60%
Imidacloprid 138261-41-3	<b>OSHA (PEL):</b> Not Established <b>ACGIH (TLV):</b> Not Established	7%	13%

Pyriproxyfen  
95737-68-1

OSHA (PEL):  
ACGIH (TLV):

0.1%

1%

### Section 3: Hazards Identification

#### EMERGENCY OVERVIEW

**CAUTION! Color:** Dark brown **Form:** Liquid **Odor:** Aromatic  
May cause eye, skin, and respiratory tract irritation. Inhalation may cause nausea or dizziness. May be harmful if swallowed. May affect nervous system. Ground containers and equipment before transferring to avoid static sparks.

#### POTENTIAL HEALTH EFFECTS

**Route(s) of Entry:** Inhalation, Skin Absorption, Skin Contact, Eye Contact

#### HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

##### Inhalation Hazards

**Acute Inhalation Hazards:** Expected to be toxic by inhalation. May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. Overexposure to vapor may produce dizziness, drowsiness, or nausea.

##### Skin Hazards

**Acute Skin Hazards:** May cause slight irritation. Not expected to be a skin sensitizer. Paraesthesia (a tingling or burning sensation on the surface of the skin) may result from skin contact with synthetic pyrethroids and normally subsides without treatment within 24 hours.

##### Eye Hazards

**Acute Eye Hazards:** May cause irritation with symptoms of reddening, tearing and stinging.

##### Ingestion Hazards

**Acute Ingestion Hazards:** Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea.

##### General Effects of Exposure

**Chronic Effects of Exposure:** Analysis of chronic feeding studies in both mice and rats with permethrin resulted in the conclusion that permethrin's potential for induction of oncogenicity in experimental animals is low, and that the likelihood of oncogenic effects in humans is nonexistent or extremely low. Chronic exposure to the solvent can cause defatting of the skin. Chronic exposure to organic solvents has been associated with various neurotoxic effects including permanent brain and nervous system damage.

##### Carcinogenic Components:

**NTP:** None

**IARC:** None

**OSHA:** None

**Medical Conditions Aggravated by Exposure:** Eye disorders, Skin disorders, Respiratory tract disorders

#### Section 4: First Aid Measures

**First Aid for Eye:** Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Get medical attention if irritation develops or persists.

**First Aid for Skin:** In case of skin contact, wash affected areas with soap and water. Wash clothing and shoes before reuse. Contact a physician if irritation develops.

**First Aid for Inhalation:** If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Call a physician.

**First Aid for Ingestion:** Contact a physician or Poison Control Center. Avoid alcohol. If ingested, do not induce vomiting unless directed to do so by medical personnel. Do not give anything by mouth to an unconscious person.

**Note to Physician:** In case of human or animal poisoning, please contact the Poison Control Center at (800)938-3578. Please also notify Bayer at (800)422-9874.

#### Section 5: Fire Fighting Measures

**Flash Point:** > 200 °F

**Flammable Limits:**

**Upper Explosion Limit (UEL %):** Not Established

**Lower Explosion Limit (LEL %):** Not Established

**Extinguishing Media:**

**Suitable:** Water, Foam, Carbon Dioxide, Dry Chemical

**Special Fire Fighting Procedures:**

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize risk of rupture. Closed container may explode when exposed to heat. Do not allow fire fighting water to enter sewer, surface waters, or ground water systems. Equipment and materials used in fighting pesticide fires may become contaminated.

#### Section 6: Accidental Release Measures

**Spill or Leak Procedures:** Evacuate and keep unnecessary people out of spill area. Remove all

sources of ignition, including flames, flares, sparks, and gas engines. Use appropriate personal protective equipment during clean up. Recover uncontaminated product, if possible. Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal. Scrub contaminated area with detergent and bleach solution. Wash spill area with water. Soil, absorbents, and other materials that are contaminated by the spilled product should be collected for proper disposal. Do not allow spilled material or wash water to enter sewers, surface waters, or groundwater systems.

### Section 7: Handling and Storage

**Shelf Life:** Not Established

**Special Sensitivity:** Avoid extreme heat. Avoid contact with moisture/water. Protect from freezing.

**Handling/Storage Precautions:** Store in a dry place in original or waterproof containers. Store in an area designated specifically for pesticides. Store separate from food products. Keep away from heat, sparks and open flame.

### Section 8: Exposure Controls/Personal Protection

#### Personal Protection Equipment

**Eye Protection Requirements:** Chemical safety goggles or glasses.

**Skin Protection Requirements:** Permeation resistant gloves, Permeation resistant footwear, Permeation resistant clothing

**Ventilation Requirements:** Use local and general exhaust ventilation to control levels of exposure.

**Respirator Requirements:** A NIOSH approved respirator for pesticides can be used to minimize exposure.

**Additional Protective Measures:** Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of this product. Follow all label instructions. Launder clothing separately after use. Employees should wash their hands and face before eating, drinking, or using tobacco products.

### Section 9: Physical and Chemical Properties

**Physical Form:** Liquid

**Color:** Dark brown

**Odor:** Aromatic

**pH:** Not Established

**Boiling Point:** Not Established

**Melting/Freezing Point:** Not Established

**Specific Gravity:** Not Established  
**Bulk Density:** 9.5 lb/gal  
**Percent Volatile by Volume:** Not Applicable  
**Vapor Pressure:** Not Established  
**Vapor Density:** > 1

#### Section 10: Stability and Reactivity

**Stability:** Stable  
**Hazardous Polymerization:** Will not occur  
**Substances to Avoid:** Oxidizing agents, Bases  
**Conditions to Avoid:** Avoid extreme heat.  
**Decomposition Products:** Carbon Dioxide, Carbon monoxide, Hydrogen chloride, Chlorine, Other potentially toxic fumes

#### Section 11: Toxicological Information

##### Toxicity Data for K9 Advantix II

**Acute oral toxicity:** LD50 = > 2,000 mg/kg (Female Rat)  
**Acute dermal toxicity:** LD50 = > 5,000 mg/kg (Male/Female Rat)  
**Acute inhalation toxicity:** LC50 = > 2.86 mg/L, 4 hrs, aerosol (Rat)  
**Eye Irritation:** Moderately irritating (Rabbit)  
**Skin Irritation:** Moderately irritating (Rat)  
**Sensitization:** Non-sensitizer (Guinea pig)

##### Toxicity Data for Permethrin

##### Toxicity Data for Amine Derivative

##### Toxicity Data for Imidacloprid

#### Section 12: Ecological Information

##### Ecological Data for K9 Advantix II

**Ecological Note:** No data available for this product.

##### Ecological Data for Permethrin

**Ecological Note:** No data available for this component.

##### Ecological Data for Amine Derivative

**Ecological Note:** No data available for this component.

##### Ecological Data for Imidacloprid

**Fish Toxicity:** LC50 = 211 mg/L, 96 hrs. Rainbow (Donaldson) Trout

(Oncorhynchus mykiss)

**Invertebrate Toxicity:** EC50 = 85 mg/L, 48 hrs. Water flea (Daphnia magna)

**Plant Toxicity:** Aquatic Plants growth rate = > 10 mg/L, 72 hrs.

### Section 13: Disposal Considerations

**Waste Disposal Method:** Waste disposal should be in accordance with existing federal, state and local environmental control laws.

### Section 14: Transportation Information

**Technical shipping name:**

#### Domestic Surface Transportation (DOT)

**Hazard Class or Division:** Non-Regulated

#### Marine Transportation (IMO / IMDG)

**Hazard Class Division** Non-Regulated

**Number:**

#### Air Transportation (ICAO / IATA)

**Hazard Class Division** Non-Regulated

**Number:**

### Section 15: Regulatory Information

#### United States Federal Regulations

**OSHA Hazcom Standard Rating:** Hazardous

**TSCA Inventory List:** This product is excluded from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

**FIFRA Status:** This product is registered with the EPA under FIFRA.

**EPA Registration Number:**

**CERCLA Hazardous Substance:**

Component(s)

None

Reportable Quantity

#### SARA Title III

**SARA Section 302 Extremely Hazardous Substances:**

Component(s)/

CAS Number

Concentration

Min.

Max.

None

**SARA Section 311/312 Hazard Categories:** Immediate Health Hazard, Fire Hazard

**SARA Section 313 Toxic Chemicals:**

<u>Component(s)/ CAS Number</u>	<u>Reporting Threshold</u>	<u>Concentration</u>	
		<u>Min.</u>	<u>Max.</u>
Permethrin 52645-53-1	1.0 %	30%	60%

**RCRA Status:** 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)

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

**State Right-to-Know Information**

<u>Component(s)/ CAS Number</u>	<u>State Code</u>	<u>Concentration</u>	
		<u>Min.</u>	<u>Max.</u>
Permethrin 52645-53-1	PA-N, NJ-E, MA-H	30%	60%
Amine Derivative	PA-N, NJ-N	30%	60%
Imidacloprid 138261-41-3	PA-N, NJ-N	7%	13%
Glycerides, mixed decanoyl and octanoyl 73398-61-5	PA-N, NJ-N	3%	7%

The following component(s) are listed under California Proposition 65:

Amine Derivative	CA-R	30%	60%
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**State Code Translation Table**

PA-N = Pennsylvania Non-hazardous  
NJ-N = New Jersey Other - includes predominant ingredients  
NJ-E = New Jersey Environmental Hazardous Substance List  
MA-H = Massachusetts Hazardous Substance List  
CA-R = Warning! This chemical is known to the State of California to cause birth defects or other reproductive harm.

**Section 16: Other Information**

Contact: John Sheehan  
Phone: (913) 268-2570  
MSDS Number: 000000002988  
Version Date: 05/18/2010  
MSDS Version: 1.2

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