



MATERIAL SAFETY DATA SHEET

BAYER HEALTHCARE LLC
Animal Health Division
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(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: Advantage II
Material Number: 83000490
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>
Aromatic alcohol CAS# is a trade secret	OSHA (PEL): Not Established ACGIH (TLV): Not Established	60%	100%
Carbonate derivative CAS# is a trade secret	OSHA (PEL): Not Established ACGIH (TLV): Not Established	10%	30%
Imidacloprid 138261-41-3	OSHA (PEL): Not Established ACGIH (TLV): Not Established	7%	13%
Pyriproxyfen 95737-68-1	OSHA (PEL): ACGIH (TLV):	0.1%	1%

Section 3: Hazards Identification

EMERGENCY OVERVIEW

CAUTION! **Color:** Light tan to light yellow **Form:** Liquid Pipettes **Odor:** Mild
May cause respiratory tract irritation. Inhalation may cause nausea or dizziness. May cause eye irritation.

POTENTIAL HEALTH EFFECTS

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

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Inhalation Hazards

Acute Inhalation Hazards: 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.

Eye Hazards

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

Ingestion Hazards

Acute Ingestion Hazards: Moderately toxic by ingestion.

General Effects of Exposure

Chronic Effects of Exposure: Prolonged contact with this product may cause defatting of the skin due to the solvent component in the product.

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.

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. Give two glasses of water for dilution. 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 Not Established

(UEL %):

Lower Explosion Limit Not Established

(LEL %):

Extinguishing Media:

Suitable: Water, Carbon Dioxide, Dry Chemical, Foam

Special Fire Fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. 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. 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. Wash spill area with soap and 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

Handling/Storage Precautions: Store in a dry place in original or waterproof containers. Avoid contact with eyes. Avoid excessive contact with skin or clothing.

Protect from freezing.

Section 8: Exposure Controls/Personal Protection

Personal Protection Equipment

Eye Protection Requirements:	Chemical safety goggles or glasses.
Skin Protection Requirements:	Gloves, long sleeved shirts and pants.
Ventilation Requirements:	Under normal conditions of use, special ventilation is not required.
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
Appearance:	Pipettes
Color:	Light tan to light yellow
Odor:	Mild
Odor Threshold:	Not Established
pH:	Not Applicable
Boiling Point:	Not Established
Melting/Freezing Point:	Not Established
Solubility in Water:	Soluble
Bulk Density:	9.1 lb/gal
Vapor Pressure:	Not Established
Vapor Density:	Not Established

Section 10: Stability and Reactivity

Stability:	Stable
Hazardous Polymerization:	Will not occur
Substances to Avoid:	Oxidizing agents
Conditions to Avoid:	Avoid extreme heat.
Decomposition Products:	Carbon monoxide, Carbon Dioxide, Oxides of Nitrogen, Hydrogen cyanide, Hydrogen chloride

Section 11: Toxicological Information

Toxicity Data for Advantage II

Acute oral toxicity:	LD50 = 1,943 mg/kg bw (Male Rat)
	LD50 = 1,732 mg/kg bw (Female Rat)
Acute dermal toxicity:	LD50 = > 2,000 mg/kg bw (Rat)
Acute inhalation toxicity:	> 2,415 mg/m ³ , 4 hrs, (Rat)
Eye Irritation:	Moderately irritating (Rabbit)
Skin Irritation:	Slightly irritating (Rabbit)
Sensitization:	Non-sensitizer (Guinea pig)

Section 12: Ecological Information

Ecological Data for Advantage II

Ecological Data for Aromatic alcohol

Ecological Note: No data available for this component.

Ecological Data for Carbonate derivative

Fish Toxicity:	LC50 = > 1,000 mg/L, 48 hrs. Golden orfe (Leuciscus idus)
Invertebrate Toxicity:	EC50 = > 500 mg/L, 24 hrs. Water flea (Daphnia magna)
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: Follow container label instructions for disposal of wastes generated during use in compliance with the FDA product label. Do not reuse container.

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.

CERCLA Hazardous Substance:

Component(s)
None

Reportable Quantity

SARA Title III

SARA Section 302 Extremely Hazardous Substances:

Component(s)/
CAS Number
None

Concentration
Min. Max.

SARA Section 311/312 Hazard Categories: Immediate Health Hazard

SARA Section 313 Toxic Chemicals:

Component(s)/
CAS Number
None

Reporting Concentration
Threshold Min. Max.

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>
Benzyl alcohol 100-51-6	PA-H, NJ-N, MA-H	60%	100%
Carbonate derivative	PA-N, NJ-N	10%	30%
Imidacloprid 138261-41-3	PA-N, NJ-N	7%	13%
Water 7732-18-5	PA-N, NJ-N	3%	7%

State Code Translation Table

PA-N = Pennsylvania Non-hazardous
PA-H = Pennsylvania Hazardous Substance List
NJ-N = New Jersey Other - includes predominant ingredients
MA-H = Massachusetts Hazardous Substance List

Section 16: Other Information

NFPA 704M Rating

Health	2
Flammability	1
Reactivity	0
Other	

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

BAYER HEALTHCARE LLC's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by BAYER HEALTHCARE LLC as a customer service.

Contact: John Sheehan
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MSDS Number: 000000002732
Version Date: 05/18/2010
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