



Material Safety Data Sheet

BAYER ADVANCED 3-IN-1 INSECT, DISEASE, & MITE CONTROL CONCENTRATE

MSDS Number: 102000015315
 MSDS Version 1.0
 Revision Date: 06/21/2006

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name BAYER ADVANCED 3-IN-1 INSECT, DISEASE, & MITE CONTROL CONCENTRATE
MSDS Number 102000015315
EPA Registration No. 72155-73

Bayer Environmental Science
 2 T.W. Alexander Drive
 Research Triangle PK, NC 27709
 USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)
 For Product Information call: 1-800-331-2867

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Imidacloprid	138261-41-3	0.4708
tau-Fluvalinate	102851-06-9	0.6099
Tebuconazole	107534-96-3	0.6502

SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview Caution! Harmful if inhaled or absorbed through skin. Avoid breathing spray mist. Avoid contact with skin, eyes and clothing. Highly toxic to fish. Highly toxic to aquatic invertebrates. Toxic to bees.

Physical State liquid

Appearance off-white

Routes of Exposure Inhalation, Skin Absorption, Eye contact, Ingestion

Immediate Effects

Eye May cause mild irritation to eyes. Avoid contact with eyes.

Skin Harmful if absorbed through skin. May cause slight irritation. Avoid contact with skin and clothing.

Ingestion Do not take internally.

Inhalation Harmful if inhaled. Avoid breathing spray mist.



Material Safety Data Sheet

MSDS Number: 102000015315
MSDS Version 1.0

BAYER ADVANCED 3-IN-1 INSECT, DISEASE, & MITE CONTROL CONCENTRATE

Chronic or Delayed Long-Term This product or its components may have target organ effects.

SECTION 4. FIRST AID MEASURES

General	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Skin	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Notes to Physician Treatment	There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point	> 93.4 °C / 200.1 °F
Suitable Extinguishing Media	water spray, foam, carbon dioxide (CO2), dry chemical
Fire Fighting Instructions	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Dike area to prevent runoff and contamination of water sources. Equipment or materials involved in pesticide fires may become contaminated. Wear self contained breathing apparatus for fire fighting if necessary. Wear full protective suit.



Material Safety Data Sheet

BAYER ADVANCED 3-IN-1 INSECT, DISEASE, & MITE CONTROL CONCENTRATE

MSDS Number: 102000015315
MSDS Version 1.0

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions** Isolate hazard area. Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces.
- Methods for Cleaning Up** Take up with absorbent material (e.g. sand, diatomaceous earth or a proprietary absorbent material). Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.
- Additional Advice** Use personal protective equipment. Do not allow product to enter streams, sewers or other waterways.

SECTION 7. HANDLING AND STORAGE

- Handling Procedures** Keep away from food, drink and animal feeding stuffs.
- Storing Procedures** Store in original container and out of the reach of children, preferably in a locked storage area.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- General Protection** There are no known hazards associated with this product when used according to the label directions. The following guidelines should be followed.

Avoid inhalation of vapour or mist. Avoid contact with skin and eyes.

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Do not allow children or pets to enter the treated area until it has dried.

Exposure Limits

Glycerine	56-81-5	ACGIH	TWA		10 mg/m3
		Form of Exposure		Mist.	
		OSHA Z1	PEL		5 mg/m3
		Form of Exposure		Respirable fraction.	
		OSHA Z1	PEL		15 mg/m3
		Form of Exposure		Total dust.	
		OSHA Z1A	TWA		5 mg/m3
		Form of Exposure		Respirable fraction.	
		OSHA Z1A	TWA		10 mg/m3
		Form of Exposure		Total dust.	
		US CA OEL	TWA PEL		5 mg/m3
		Form of Exposure		Respirable fraction.	
		US CA OEL	TWA PEL		10 mg/m3



Material Safety Data Sheet

BAYER ADVANCED 3-IN-1 INSECT, DISEASE, & MITE CONTROL CONCENTRATE

MSDS Number: 102000015315
MSDS Version 1.0

Form of Exposure

Total dust.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	off-white
Physical State	liquid
pH	>= 5.0 (100 %)
Density	ca. 1.0276 g/cm ³ at 20 °C
Viscosity	100 - 500 mPa.s

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
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SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the technical-grade active ingredients, imidacloprid, tau-fluvalinate and tebuconazole.

Acute Oral Toxicity	female rat: LD50: > 2,000 mg/kg
Acute Dermal Toxicity	male/female rat: LD50: > 4,000 mg/kg
Acute Inhalation Toxicity	male/female rat: LC50: > 5.1 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. (actual)
	male/female rat: LC50: > 20.4 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50. (actual)
Skin Irritation	rabbit: Slight irritation.
Eye Irritation	rabbit: Minimally irritating.
Sensitization	guinea pig: Non-sensitizing.
Chronic Toxicity	IMIDACLOPRID caused liver and/or thyroid effects in chronic studies in rats and dogs.



Material Safety Data Sheet

MSDS Number: 102000015315
MSDS Version 1.0

BAYER ADVANCED 3-IN-1 INSECT, DISEASE, & MITE CONTROL CONCENTRATE

TAU-FLUVALINATE caused clinical signs of pyrethroid toxicity, decreased body weights and/or liver effects in chronic toxicity studies in rats and dogs.
TEBUCONAZOLE caused liver, spleen, adrenal and/or eye effects at high doses in chronic studies in rats and dogs.

Assessment Carcinogenicity

IMIDACLOPRID and TAU-FLUVALINATE were not considered carcinogenic in oncogenicity studies in rats and mice.
TEBUCONAZOLE is classified by EPA as a Group C carcinogen (possible human carcinogen) based on liver tumors in mice and no evidence of carcinogenicity in rats. As the liver tumors were seen only at a dose exceeding a Maximum Tolerated Dose (MTD), no significant carcinogenic risk is posed for human exposure.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Reproductive & Developmental Toxicity

REPRODUCTION: IMIDACLOPRID, TAU-FLUVALINATE and TEBUCONAZOLE are not considered primary reproductive toxicants in rats. Reproductive effects (e.g., decreased pup body weights) were observed at the highest concentration but were considered secondary to maternal toxicity.

DEVELOPMENTAL TOXICITY: IMIDACLOPRID, TAU-FLUVALINATE and TEBUCONAZOLE are not considered primary developmental toxicants in laboratory animals. Developmental effects were observed only at doses that caused maternal toxicity.

Neurotoxicity

IMIDACLOPRID and TEBUCONAZOLE caused only transient neurobehavioral effects (e.g., decreased motor activity) in acute, subchronic and/or developmental neurotoxicity studies in rats.
TAU-FLUVALINATE caused typical clinical signs associated with pyrethroid neurotoxicity (e.g., transient hyperactivity) at high doses in rats.

Mutagenicity

IMIDACLOPRID, TAU-FLUVALINATE and TEBUCONAZOLE are not considered genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION



Material Safety Data Sheet

MSDS Number: 102000015315
MSDS Version 1.0

BAYER ADVANCED 3-IN-1 INSECT, DISEASE, & MITE CONTROL CONCENTRATE

Environmental Precautions

Highly toxic to fish. Highly toxic to aquatic invertebrates. Do not apply directly to water. Do not apply when weather conditions favor runoff or drift. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

Toxic to bees. Applications should be timed to coincide with periods of minimum bee activity, usually between late evening and early morning. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Never place unused product down any indoor or outdoor drain.

Container Disposal

Do not re-use empty containers. Place empty container in trash.

SECTION 14. TRANSPORT INFORMATION

TRANSPORTATION CLASSIFICATION:
Not regulated for shipment by any mode of transportation

FREIGHT CLASSIFICATION:
Insecticides or Fungicides, N.O.I., other than poison

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 72155-73

US Federal Regulations

TSCA list

None.

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.



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MSDS Version 1.0

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This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

None.

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Reactivity - 0 Others - none

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: New Material Safety Data Sheet.

Revision Date: 06/21/2006

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.