

**Material Safety Data Sheet****BAYER ADVANCED POWERFORCE CARPENTER ANT & TERMITE KILLER PLUS CONCENTRATE**

MSDS Number: 102000012309

MSDS Version 2.0

Revision Date: 06/24/2005

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name	BAYER ADVANCED POWERFORCE CARPENTER ANT & TERMITE KILLER PLUS CONCENTRATE
MSDS Number	102000012309
EPA Registration No.	72155-58
Product Use	For use to protect the home against termites, carpenter ants and other wood-destroying pests.

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>
beta-Cyfluthrin	68359-37-5	2.50

SECTION 3. HAZARDS IDENTIFICATION

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

<u>Emergency Overview</u>	Caution! Harmful if swallowed, inhaled or absorbed through the skin. Avoid contact with skin, eyes and clothing. Avoid breathing spray mist. Moderate eye irritation
Physical State	liquid
Appearance	off-white
Routes of Exposure	Eye contact, Inhalation, Skin Absorption, Ingestion
Immediate Effects	
Eye	May cause eye irritation. Avoid contact with eyes.
Skin	Harmful if absorbed through skin. Can cause irritation to the skin resulting in effects such as burning and/or tingling sensation.

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Ingestion	Harmful if swallowed. Do not take internally.
Inhalation	Harmful if inhaled. Avoid breathing spray mist. May cause upper respiratory tract irritation.
Medical Conditions Aggravated by Exposure	No specific medical conditions are known which may be aggravated by exposure to this product. As with all materials which can cause upper respiratory tract irritation, persons with a history of asthma, emphysema, or hyperreactive airways disease may be more susceptible to overexposure.

SECTION 4. FIRST AID MEASURES

General	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 poison control center or doctor for treatment advice.
Skin	Take off all contaminated clothing immediately. Rinse immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. 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.
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 poison control center or doctor for further treatment advice.
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 °C / > 199 °F
Suitable Extinguishing Media	dry chemical, foam, water

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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.

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES**Personal Precautions**

Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods for Cleaning Up

Take all necessary action to prevent and to remedy the effects of the spill. Take up with absorbent material (e.g. sand, earth or a proprietary absorbent material). Place in a container for disposal. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

Additional Advice

Use personal protective equipment. Do not allow material to enter streams, sewers, or other waterways.

SECTION 7. HANDLING AND STORAGE**Handling Procedures**

Food utensils such as teaspoons or measuring cups must not be used for food purposes after use in measuring pesticides.

Storing Procedures

Store in original container and out of the reach of children, preferably in a locked storage area. Store in a cool, dry secured storage area.

Min/Max Storage Temperatures

No minimum / 30 day average temperature is not to exceed 38°C / 100°F.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**General Protection**

There are no known hazards associated with this product when used according to the label directions. At the same time, the following guidelines should be used.

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, or using the toilet.

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



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Engineering Controls	Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.				
Eye/Face Protection	goggles				
Hand Protection	Chemical resistant nitrile rubber gloves				
Body Protection	Wear long-sleeved shirt and long pants and shoes plus socks.				
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
		Form of Exposure		Total dust.	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	off-white
Physical State	liquid
pH	7 - 8.5
Density	1.0147 g/ml at 20 °C
Melting/Freezing Point	-6.6 °C / 20.1 °F

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Incompatibility	methanol alkalines

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MSDS Version 2.0**SECTION 11. TOXICOLOGICAL INFORMATION**

Acute toxicity studies for this product have been bridged from another product containing ~11.8% of the active ingredient, Beta-cyfluthrin, an enriched isomer mixture of Cyfluthrin. The non-acute information pertains to the active ingredient, Beta-cyfluthrin technical. Toxicology information on Cyfluthrin technical can be obtained by calling the Product Use Information Number on Page 1.

Acute Oral Toxicity male rat: LD50: 960 mg/kg

female rat: LD50: 1,150 mg/kg

Acute Dermal Toxicity male/female rat: LD50: > 2,000 mg/kg**Acute Inhalation Toxicity** male/female rat: LC50: > 1.72 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
Maximum attainable concentration.male/female rat: LC50: > 6.88 mg/l
Exposure time: 1 h
Determined in the form of liquid aerosol.
Extrapolated from the 4 hr LC50.
(actual)**Skin Irritation** rabbit: No skin irritation**Eye Irritation** rabbit: Mild eye irritation**Sensitization** guinea pig: Non-sensitizing**Subchronic Toxicity** Beta-cyfluthrin produced general signs of toxicity (e.g., decreased body weights) and/or neurobehavioral effects (e.g., uncoordinated gait) in subchronic dietary studies (rats,dogs) and in a 4-week inhalation study (rats).**Assessment Carcinogenicity****ACGIH**

None.

NTP

None.

IARC

None.

OSHA

None.

Reproductive & Developmental Toxicity

Beta-cyfluthrin was not a primary developmental toxicant in a developmental toxicity study in rats. Developmental effects (e.g., delayed ossifications) were observed at the high-dose but were considered secondary to maternal toxicity.

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Beta-cyfluthrin produced slight transient neurobehavioral effects at the highest dose tested in acute and subchronic neurotoxicity screening studies in rats. There were no correlating compound-related morphological changes in the neural tissues in either study.

In a one-generation developmental neurotoxicity screening study in rats, offspring exposed to beta-cyfluthrin exhibited a reduction in startle response amplitude at the highest dose tested in conjunction with maternal toxicity. There were no compound-related morphological changes observed in the neural tissues.

Mutagenicity

Beta-cyfluthrin was not a mutagenic or genotoxic in a battery of in vitro and in vivo mutagenicity studies.

SECTION 12. ECOLOGICAL INFORMATION**Environmental Precautions**

Highly toxic to fish. Highly toxic to aquatic invertebrates. Do not apply directly to water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

This product is highly toxic to bees exposed to direct treatment or residues remaining on the treated areas. Do not apply this product or allow drift when bees are actively visiting the treatment area. Apply this product only as specified on the label.

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 any applicable state or local guidelines. Never place unused product down any indoor or outdoor drain.

Container Disposal

Do not re-use empty containers. Rinse empty containers with water and use the rinse-water to prepare the working solution. Place empty container in trash.

SECTION 14. TRANSPORT INFORMATION**DOT CLASSIFICATION:**

Not regulated for Domestic Surface Transportation

FREIGHT CLASSIFICATION:

Insecticides or Fungicides , N.O.I., other than poison

SECTION 15. REGULATORY INFORMATION



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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

beta-Cyfluthrin

68359-37-5

1.0%

US States Regulatory Reporting

CA Prop65

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

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

US State Right-To-Know Ingredients

beta-Cyfluthrin

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NJ

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.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

beta-Cyfluthrin

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SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

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

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

Reason to Revise: Re-numbered due to system update.



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