



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 : (877) 258-2280
BAYER INFORMATION PHONE: (800) 633-3796

Section 1: Product and Company Identification

Product Name: Cylence Ultra
Material Number: 8712118
Chemical Family: Pyrethroid Insecticide
Chemical Name: Cyano(4-fluoro-3-phenoxyphenyl)methyl 3-(2,2 -dichloroethenyl)-
2,2-dimethylcyclopropanecarboxylate
Synonyms: beta-Cyfluthrin
Formula: C22 H18 Cl2 F N O3

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>
Heterocyclic compound Specific chemical identity is withheld as a trade secret	OSHA (PEL): Not Established ACGIH (TLV): Not Established		20%
beta-Cyfluthrin 68359-37-5	OSHA (PEL): Not Established ACGIH (TLV): Not Established		9%

Metal oxide
Specific chemical identity is withheld as a trade secret

OSHA (PEL): 1% 5%
15.00 mg/m³ TWA
Total Dust
ACGIH (TLV):
10.00 mg/m³ TWA

Section 3: Hazards Identification

EMERGENCY OVERVIEW

WARNING! Color: Purple Form: Solid Tag Odor: Slight, Aromatic
May cause eye, skin, and respiratory tract irritation. Harmful if absorbed through skin.

POTENTIAL HEALTH EFFECTS

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

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Inhalation Hazards

Acute Inhalation Hazards: Exposure during the end use of this product is expected to be minimal. The active ingredient is toxic by inhalation. May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

Skin Hazards

Acute Skin Hazards: May cause irritation with symptoms of reddening and itching. 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. Toxic by skin absorption.

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: No applicable information was found concerning any adverse chronic health effects from overexposure to this product.

Carcinogenic Components:

NTP: None

IARC: None

OSHA: None

Medical Conditions

Aggravated by Exposure: Eye disorders, Skin disorders, Respiratory tract disorders, Kidney disorders, Liver 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 immediately.
First Aid for Ingestion:	Contact a physician or Poison Control Center. If ingested, do not induce vomiting unless directed to do so by medical personnel.
Note to Physician:	Published data indicate vitamin E acetate can prevent and/or mitigate symptoms of parasthesia caused by synthetic pyrethroids. In case of human or animal poisoning, please contact the poison control center at (800) 414-0244. Please also notify Bayer at (877) 258-2280.

Section 5: Fire Fighting Measures

Flash Point:	Not Applicable
Flammable Limits:	
Upper Explosion Limit (UEL %):	Not Applicable
Lower Explosion Limit (LEL %):	Not Applicable
Extinguishing Media:	
Suitable:	Water, Foam, Dry Chemical
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.

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. Avoid creating dusty conditions. Collect and place in appropriately marked sealable containers for disposal. Wash spill area with soap and water. Do not allow spilled material or wash water to enter sewers, surface waters, or groundwater systems. Collect wash water for approved disposal.
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Section 7: Handling and Storage

Storage Temperature:	
Minimum:	0 °F
Maximum:	100 °F
Shelf Life:	Contact Bayer for specific information.
Special Sensitivity:	Not Established
Handling/Storage Precautions:	Store separate from food products. Store in a dry place in original or waterproof containers. Store in an area designated specifically for pesticides.

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., Highly chemically resistant gloves (such as flexible laminated, eg. Silver Shield)
Ventilation Requirements:	Under normal conditions of use, special ventilation is not required.
Respirator Requirements:	A NIOSH approved air purifying respirator with organic vapor cartridges and particulate prefilter can be used to minimize exposure.
Additional Protective Measures:	Emergency showers and eye wash stations should be available. Note that thorough washing with soap and water does not always totally remove cyfluthrin from the hands. Waterless hand cleaner use is often more effective than soap and water. Sensitive areas of the skin and mucous membranes can become contaminated indirectly. 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:	Solid
Appearance:	Tag
Color:	Purple
Odor:	Slight, Aromatic
Boiling Point:	Not Established
Melting/Freezing Point:	Not Established
Solubility in Water:	Not Applicable
Specific Gravity:	Not Established
Bulk Density:	Not Established
Vapor Pressure:	Not Applicable

Section 10: Stability and Reactivity

Stability:	Stable
Hazardous Polymerization:	Will not occur
Substances to Avoid:	Bases, Methanol, Disinfectants
Conditions to Avoid:	None known.
Decomposition Products:	Not established

Section 11: Toxicological Information

Toxicity Data for Cyience Ultra

Toxicity Note: No data available for this product.

Toxicity Data for beta-Cyfluthrin

Acute oral toxicity:	LD50 = 84 - 380 mg/kg bw (Male Rat) LD50 = 77 - 651 mg/kg bw (Female Rat)
Acute dermal toxicity:	LD50 = > 5,000 mg/kg bw (Rat)
Acute inhalation toxicity:	LC50 = 0.08 mg/L, 4 hrs, aerosol (Rat) LC50 = 0.53 mg/L, 4 hrs, dust/particulate (Rat)
Eye Irritation:	Slightly irritating (Rabbit)
Skin Irritation:	Slightly irritating (Rabbit)
Sensitization:	non-sensitizer dermal (Guinea pig)
Repeated Dose Toxicity:	In a 13 week dog study, beta-Cyfluthrin was administered at dietary concentrations of 10, 60 or 360 ppm. Effects included vomiting and diarrhea after feeding, decreased body weight gain, and motor disturbances in the hind limbs. The no-observed effect-level (NOEL) was 60 ppm. In a 13 week study using rats, beta-Cyfluthrin was administered at dietary concentrations of 30, 125 or 500 ppm. Effects included reduced body weight gains and feed consumption, uncoordinated gait, and skin injuries of the neck and head from excessive preening due to the local irritant effect of the test material. The NOEL was 125 ppm. In a 4 week inhalation study, rats were exposed to beta-Cyfluthrin at liquid aerosol concentrations of 0.2, 2.7 or 23.5 mg/m ³ . Effects observed included ungroomed fur, piloerection, hyper- and hypoactivity, reduced body weight gains, reduced organ weights (thymus and spleen), and hematological changes. The NOEL was 0.2 mg/m ³ based on decreased body weight gains.
Mutagenicity:	No mutagenic effects were determined in various in vivo and in vitro tests.

Developmental Toxicity/Teratogenicity: In a developmental toxicity study, beta-Cyfluthrin was administered orally to rats during gestation at doses of 3, 10 or 40 mg/kg. At the lethal and maternally toxic dose of 40 mg/kg, there was a decrease in fetal body weights and an increased incidence of skeletal findings. The NOELs for maternal and developmental toxicity were 3 and 10 mg/kg, respectively.

Neurotoxicity: In a 13 week neurotoxicity screening study, beta-Cyfluthrin was administered to rats at dietary concentrations of 30, 125, or 400 ppm. Effects observed included reduced body weight and food consumption, ataxia, repetitive chewing and pawing, increased activity and reactivity, and red nasal stain. There were no micropathologic findings within the neural tissues or skeletal muscle. The NOEL for subchronic neurotoxicity was 400 ppm, the highest dose tested. The overall NOEL was 30 ppm.

Toxicity Data for Heterocyclic compound

Acute oral toxicity: LD50 = 6,150 mg/kg bw (Rat)

Acute dermal toxicity: LD50 = 200 mg/kg bw (Rabbit)

Section 12: Ecological Information

Ecological Data for Cylence Ultra

Ecological Note: This compound has been thoroughly evaluated for ecological effects. Bayer will provide a summary of specific data upon written request. As with any pesticide, this product should be used according to label directions and should be kept out of streams, lakes and other aquatic habitats of concern.

Section 13: Disposal Considerations

Waste Disposal Method: Waste disposal should be in accordance with existing federal, state and local environmental control laws. Spent tags may be disposed of on site or at an approved waste disposal

Section 14: Transportation Information

Technical shipping name: Animal drugs and medicines

Freight Class

Bulk: Insecticides, N.O.I. (NMFC 102120)

Package: Insecticides, N.O.I. (NMFC 102120)

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 Hazardous
Rating:

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

CERCLA Hazardous Substance:

<u>Component(s)</u>	<u>Reportable Quantity</u>
None	

SARA Title III

SARA Section 302 Extremely Hazardous Substances:

<u>Component(s)/ CAS Number</u>	<u>Concentration</u>	
	<u>Min.</u>	<u>Max.</u>
None		

SARA Section 311/312 Hazard Immediate Health Hazard
Categories:

SARA Section 313 Toxic Chemicals:

<u>Component(s)/ CAS Number</u>	<u>Reporting Threshold</u>	<u>Concentration</u>	
		<u>Min.</u>	<u>Max.</u>
Exempt			
Piperonyl butoxide 51-03-6	1.0 %		20%
beta-Cyfluthrin 68359-37-5			9%

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

Component(s)/
CAS Number

State Code

Concentration
Min. Max.

State Code Translation Table

Section 16: Other Information

Contact: John Sheehan
Phone: (913) 268-2570
MSDS Number: R00000000056
Version Date: 06/11/2004
MSDS Version: 1.12

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