



# 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:** Tempo SC Ultra Pest Control Concentrate  
**Material Number:** 80694254  
**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/<br/>CAS Number</u>       | <u>Exposure Limits</u>   | <u>Concentration</u> |             |
|--|--|----------------------|-------------|
|  |  | <u>Min.</u>          | <u>Max.</u> |
| beta-Cyfluthrin<br>68359-37-5                | <b>OSHA (PEL):</b><br>Not Established<br><b>ACGIH (TLV):</b><br>Not Established  | 10%                  | 30%         |
| Polyhydric alcohol<br>CAS# is a trade secret | <b>OSHA (PEL):</b><br>5.00 mg/m3 TWA<br>Respirable Fraction<br>15.00 mg/m3 TWA<br>Total Dust<br><b>ACGIH (TLV):</b><br>10.00 mg/m3 TWA | 7%                   | 13%         |

### Section 3: Hazards Identification

#### EMERGENCY OVERVIEW

**CAUTION!** Toxic. **Color:** Beige **Form:** Liquid Suspension **Odor:** Talc  
Harmful if inhaled.

#### POTENTIAL HEALTH EFFECTS

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

#### HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

##### Inhalation Hazards

**Acute Inhalation Hazards:** Expected to be toxic by inhalation.

##### Skin Hazards

**Acute Skin Hazards:** 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 slight irritation.

##### 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:** 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. If syrup of ipecac is available, administer 1 tablespoonful (15 mL) of syrup of ipecac followed by 1 to 2 glasses of water. If vomiting does not occur within 20 minutes, repeat the dose once. 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:** > 200 °F (> 93 °C)

**Flammable Limits:**

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

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

**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. Use cold water spray to cool fire-exposed containers to minimize risk of rupture. 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**

**Storage Temperature:**

**Minimum:** 0 °F

**Maximum:** 100 °F

**Shelf Life:** Contact Bayer for specific information.

**Special Sensitivity:** Not Established

**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. Avoid contact with eyes. Avoid excessive contact with skin or clothing.

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

**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. Waterless hand cleaner use is often more effective than soap and water. 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:** Suspension

**Color:** Beige

**Odor:** Talc

**pH:** 7 - 8

**Boiling Point:** Not Established

**Melting/Freezing Point:** Approximately 20 °F (68 °C)

**Viscosity:** 1060 cps @ 23 C

**Solubility in Water:** Not Established

**Specific Gravity:** 1.06 @ 20 °C

**Bulk Density:** Not Established

#### Section 10: Stability and Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

**Substances to Avoid:** Bases, Methanol, Disinfectants

**Conditions to Avoid:** Not established

**Decomposition Products:** Not established

### Section 11: Toxicological Information

#### Toxicity Data for Tempo SC Ultra Pest Control Concentrate

**Acute oral toxicity:** LD50 = 960 mg/kg bw (Male Rat)  
LD50 = 1,150 mg/kg bw (Female Rat)

**Acute dermal toxicity:** LD50 = > 2,000 mg/kg bw (Rat)

**Acute inhalation toxicity:** > 1.72 mg/L, 4 hrs, aerosol (Rat)

**Eye Irritation:** Slightly irritating (Rabbit)

**Skin Irritation:** Non-irritating (Rabbit)

**Sensitization:** Non-sensitizer (Guinea pig)

#### 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<sup>3</sup>. 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<sup>3</sup> 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 Polyhydric alcohol**

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

**Section 12: Ecological Information**

**Ecological Data for Tempo SC Ultra Pest Control Concentrate**

**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.

**Ecological Data for beta-Cyfluthrin**

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

**Ecological Data for Polyhydric alcohol**

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

**Section 13: Disposal Considerations**

**Waste Disposal Method:** Follow container label instructions for disposal of wastes generated during use in compliance with the FIFRA product label. In other situations, bury in an EPA approved landfill or burn in an incinerator approved for pesticide destruction. Do not reuse container.

**Empty Container Precautions:** Do not reuse empty container.

**Section 14: Transportation Information**

**Technical shipping name:** Pesticide

**Freight Class**

**Bulk:** Not Applicable

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

**Product Label:** Tempo SC Ultra Insecticide

**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:** Not listed on TSCA Inventory, for R&D Use Only, Section 5 (h)(3) limitations apply.

**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  
beta-Cyfluthrin  
68359-37-5

Reporting  
Threshold  
1 %

Concentration  
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)/<br/>CAS Number</u> | <u>State Code</u> | <u>Concentration</u> |             |
|-------------------------------------|-------------------|----------------------|-------------|
|                                     |                   | <u>Min.</u>          | <u>Max.</u> |
| Trade Secret Component              | PA-N, NJ-N        | 60%                  | 100%        |
| beta-Cyfluthrin<br>68359-37-5       | NJ-E, NJ-N        | 10%                  | 30%         |
| Polyhydric alcohol                  | PA-H, MA-H        | 7%                   | 13%         |
| Polyoxyethylene(25)tristyrylphenol  | PA-N, NJ-N        | 1%                   | 5%          |

**State Code Translation Table**

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

**Section 16: Other Information****NFPA 704M Rating**

|                     |   |
|---------------------|---|
| <b>Health</b>       | 1 |
| <b>Flammability</b> | 1 |
| <b>Reactivity</b>   | 1 |
| <b>Other</b>        |   |

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  
 Phone: (913) 268-2570  
 MSDS Number: R38301  
 Version Date: 03/18/2008  
 MSDS Version: 1.22

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