



TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

1/11
Revision Date: 06/12/2014
Print Date: 02/09/2015

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name TEMPO® ULTRA WP INSECTICIDE

Product code (UVP) 03545575

SDS Number 102000016285

EPA Registration No. 432-1304

Relevant identified uses of the substance or mixture and uses advised against

Use Insecticide

Restrictions on use See product label for restrictions.

Information on manufacturer

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

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577 (24 hours/day)

Product Information Telephone Number 1-800-331-2867

SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Eye irritation : Category 2B

Acute toxicity (Oral): Category 4



Signal word: Warning

Hazard statements

Causes eye irritation.

Harmful if swallowed.

Precautionary statements

Wash face, hands and any exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

2/11
Revision Date: 06/12/2014
Print Date: 02/09/2015

Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
Rinse mouth.
Dispose of contents/container in accordance with local regulation.

Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Average % by Weight
Beta-Cyfluthrin	68359-37-5	10.00
Sodium lignosulphonate	8061-51-6	4.00
Crystalline quartz (respirable)	14808-60-7	3.95

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
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.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Eye contact	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.
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.

Most important symptoms and effects, both acute and delayed

Symptoms	To date no symptoms are known.
Indication of any immediate medical attention and special treatment needed	

Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.
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TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

3/11
Revision Date: 06/12/2014
Print Date: 02/09/2015

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water, Dry chemical

Unsuitable None known.

Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information Keep out of smoke. Fight fire from upwind position. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point not applicable

Autoignition temperature no data available

Lower explosion limit not applicable

Upper explosion limit not applicable

Explosivity no data available

Dust explosion class no data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Avoid dust formation. Do not breathe dust. Isolate hazard area. Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations. Contaminated soil may have to be removed and disposed.

Additional advice Do not allow to enter soil, waterways or waste water canal. Use personal protective equipment.

Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.



TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

4/11
Revision Date: 06/12/2014
Print Date: 02/09/2015

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Protect from freezing.
Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Beta-Cyfluthrin	68359-37-5	50ug/m3 (ST ESL)	10 2003	TX ESL
Beta-Cyfluthrin (Particulate.)	68359-37-5	50ug/m3 (ST ESL)	10 2003	TX ESL
Beta-Cyfluthrin (Particulate.)	68359-37-5	5ug/m3 (AN ESL)	10 2003	TX ESL
Beta-Cyfluthrin	68359-37-5	5ug/m3 (AN ESL)	10 2003	TX ESL
Beta-Cyfluthrin	68359-37-5	0.01 mg/m3 (TWA)		OES BCS*
Quartz (Silica, Crystalline) (Respirable fraction.)	14808-60-7	0.025 mg/m3 (TWA)	02 2012	ACGIH
Quartz (Silica, Crystalline) (Respirable dust.)	14808-60-7	0.05 mg/m3 (REL)	2010	NIOSH
Quartz (Silica, Crystalline) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA)	1989	OSHA Z1A
Quartz (Silica, Crystalline) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA)	06 2008	TN OEL
Quartz (Silica, Crystalline)	14808-60-7	14ug/m3 (ST ESL)	03 2012	TX ESL



TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

5/11
Revision Date: 06/12/2014
Print Date: 02/09/2015

Quartz (Silica, Crystalline) (Total dust.)	14808-60-7	0.3 mg/m3 (TWA PEL)	08 2010	US CA OEL
Quartz (Silica, Crystalline) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA PEL)	08 2010	US CA OEL
Quartz (Silica, Crystalline) (Total dust.)	14808-60-7	0.3 mg/m3 (TWA)	2000	Z3
Quartz (Silica, Crystalline) (Respirable.)	14808-60-7	2.4millions of particles per cubic foot of air (TWA)	2000	Z3
Quartz (Silica, Crystalline) (Respirable.)	14808-60-7	0.1 mg/m3 (TWA)	2000	Z3
Sodium lignosulphonate (Particulate.)	8061-51-6	50ug/m3 (ST ESL)	02 2013	TX ESL
Sodium lignosulphonate (Particulate.)	8061-51-6	5ug/m3 (AN ESL)	02 2013	TX ESL

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection

Chemical resistant nitrile rubber gloves

Eye protection

Goggles

Skin and body protection

Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.
Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	tan
Physical State	powder
Odor	characteristic
Odour Threshold	no data available
pH	no data available
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available



TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

6/11
Revision Date: 06/12/2014
Print Date: 02/09/2015

Bulk density	19 - 26 lb/ft ³
Evaporation rate	not applicable
Boiling Point	not applicable
Melting / Freezing Point	not applicable
Water solubility	no data available
Minimum Ignition Energy	no data available
Decomposition temperature	no data available
Partition coefficient: n-octanol/water	no data available
Viscosity	not applicable
Flash point	not applicable
Autoignition temperature	no data available
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Explosivity	no data available
Dust explosion class	no data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	no data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Exposure to moisture. Heat, flames and sparks.
Incompatible materials	Bases, Methanol
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Eye contact, Skin Absorption, Skin contact, Inhalation, Ingestion
Immediate Effects	



TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

7/11
Revision Date: 06/12/2014
Print Date: 02/09/2015

Eye	Moderate eye irritation.
Skin	Harmful if absorbed through skin.
Ingestion	Harmful if swallowed.
Inhalation	Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity	LD50 (male rat) 3,084 mg/kg LD50 (female rat) 1,733 mg/kg
Acute inhalation toxicity	LC50 (rat) > 1.18 mg/l Exposure time: 4 h Determined in the form of dust. LC50 (rat) > 4.72 mg/l Exposure time: 1 h Determined in the form of dust. Extrapolated from the 4 hr LC50.
Acute dermal toxicity	LD50 (rabbit) > 2,000 mg/kg
Skin irritation	Mild skin irritation. (rabbit)
Eye irritation	Mild eye irritation. (rabbit)
Sensitisation	Non-sensitizing. (guinea pig)

Assessment repeated dose toxicity

The toxic effects of beta-Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

Assessment Mutagenicity

beta-Cyfluthrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

beta-Cyfluthrin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

beta-Cyfluthrin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with beta-Cyfluthrin is related to parental toxicity.



TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

8/11
Revision Date: 06/12/2014
Print Date: 02/09/2015

Assessment developmental toxicity

beta-Cyfluthrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with beta-Cyfluthrin are related to maternal toxicity.

Further information

Acute toxicity studies have been bridged from a similar formulation(s).
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 0.000068 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient beta-cyfluthrin.
Toxicity to aquatic invertebrates	EC50 (Water flea (<i>Daphnia magna</i>)) 0.00029 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient beta-cyfluthrin.
Toxicity to aquatic plants	EC50 (<i>Desmodesmus subspicatus</i>) > 0.01 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient beta-cyfluthrin. No acute toxicity was observed at its limit of water solubility.
Biodegradability	beta-Cyfluthrin; not rapidly biodegradable
Koc	beta-Cyfluthrin: Koc: 508 - 3179
Bioaccumulation	beta-Cyfluthrin: Bioconcentration factor (BCF) 506; Does not bioaccumulate.
Mobility in soil	beta-Cyfluthrin: Immobile in soil
Environmental precautions	Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. 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. 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

Waste treatment methods

Product	Dispose in accordance with all local, state/provincial and federal regulations. Follow advice on product label and/or leaflet.
Contaminated packaging	Do not re-use empty containers. Completely empty container into application equipment, then dispose of



TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

9/11
Revision Date: 06/12/2014
Print Date: 02/09/2015

empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. If burned, stay out of smoke. Follow advice on product label and/or leaflet.

RCRA Information

Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR Not dangerous goods / not hazardous material

IMDG

UN number **3077**
Class 9
Packaging group III
Marine pollutant YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BETA-CYFLUTHRIN MIXTURE)

IATA

UN number **3077**
Class 9
Packaging group III
Environm. Hazardous Mark YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BETA-CYFLUTHRIN MIXTURE)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN POISON

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1304

US Federal Regulations

TSCA list

Sodium lignosulphonate 8061-51-6

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.



TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

10/11
Revision Date: 06/12/2014
Print Date: 02/09/2015

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 68359-37-5 NJ

Canadian Regulations

Canadian Domestic Substance List

Sodium lignosulphonate 8061-51-6

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: Moderate eye irritation.
Harmful if swallowed, inhaled or absorbed through the skin.
Do not get in eyes, on skin, or on clothing.
Avoid breathing dust or spray mist.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 1 Instability - 1 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 1 PPE -

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

Bayer Environmental Science
SAFETY DATA SHEET



TEMPO® ULTRA WP INSECTICIDE

Version 3.0 / USA
102000016285

11/11
Revision Date: 06/12/2014
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Reason for Revision: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

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