

SAFETY DATA SHEET



TEMPO® 20 WP INSECTICIDE

Version 2.0 / CDN
102000007122

1/11
Revision Date: 02/10/2017
Print Date: 02/10/2017

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

Product identifier

Trade name TEMPO® 20 WP INSECTICIDE

Product code (UVP) 04399757

SDS Number 102000007122

PCP Registration No. 25673

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

Use Insecticide

Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer CropScience Inc
#200, 160 Quarry Park Blvd, SE
Calgary, Alberta T2C 3G3
Canada

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

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

Product Information Telephone Number 1-888-283-6847

SECTION 2: HAZARDS IDENTIFICATION

Classified in accordance with Part 2 of the Hazardous Products Regulations

Specific target organ toxicity - repeated exposure(Inhalation): Category 1

Carcinogenicity(Inhalation): Category 1B

Acute toxicity(Oral): Category 4

Labelling in accordance with Part 3 of the Hazardous Products Regulations



Signal word: Danger

Hazard statements

Causes damage to organs (Lungs) through prolonged or repeated exposure.

May cause cancer by inhalation.

Harmful if swallowed.

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Precautionary statements

Do not breathe dust or mist.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
Get medical advice/ attention if you feel unwell.
IF exposed or concerned: Get medical advice/ attention.
IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
Rinse mouth.
Store locked up.
Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.
No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Cyfluthrin	68359-37-5	20.0
Crystalline quartz (respirable)	14808-60-7	3.3

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.

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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.

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

Further information Fight fire from upwind position. Evacuate personnel to safe areas. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point Not applicable

Auto-ignition temperature No data available

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Explosivity No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Do not enter confined spaces unless adequately ventilated. Use personal protective equipment.

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. Decontaminate tools and equipment following cleanup.

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Additional advice Use personal protective equipment. If material is accidentally spilled, do not allow to enter soil, waterways or waste water canal.

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

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion Keep away from heat and sources of ignition.

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 Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers 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. Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Cyfluthrin	68359-37-5	0.01 mg/m ³ (TWA)		OES BCS*
Crystalline quartz (respirable) (Respirable particles.)	14808-60-7	0.025 mg/m ³ (TWA)	07 2009	CAD AB OEL
Crystalline quartz (respirable) (Respirable fraction.)	14808-60-7	0.025 mg/m ³ (TWA)	09 2011	CAD BC OEL
Crystalline quartz (respirable) (Respirable fraction.)	14808-60-7	0.025 mg/m ³ (TWA)	03 2011	CAD MB OEL

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Crystalline quartz (respirable) (Respirable fraction.)	14808-60-7	0.10 mg/m ³ (TWA)	06 2015	CAD ON OEL
Crystalline quartz (respirable) (Respirable fraction.)	14808-60-7	0.05 mg/m ³ (8 HR ACL)	05 2009	CAD SK OEL
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.1 mg/m ³ (TWA)	11 2011	OEL (QUE)

*OES BCS: Internal Bayer AG, Crop Science Division "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

Tightly fitting safety 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	aromatic
Odour Threshold	No data available
pH	9.2 (as aqueous solution)
Vapor Pressure	< 0.0000001 hPa at 20 °C
Vapor Density (Air = 1)	No data available
Bulk density	18.0 - 26 lb/ft ³
Evaporation rate	Not applicable

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Boiling Point	Not applicable
Melting / Freezing Point	Not applicable
Water solubility	dispersible
Minimum Ignition Energy	No data available
Decomposition temperature	No data available
Partition coefficient: n-octanol/water	Not applicable
Viscosity	Not applicable
Flash point	Not applicable
Auto-ignition temperature	No data available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Explosivity	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	Heat, flames and sparks. Exposure to moisture.
Incompatible materials	Methanol, Alkali metals, Alkaline earth metals, Bases, Light metals
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Inhalation, Skin Absorption, Eye contact, Skin contact
Immediate Effects	
Eye	Mild eye irritation.

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Skin	Mild skin irritant. May cause a transient, localized paresthesia, characterized by tingling, burning or numbness sensation in some individuals.
Ingestion	Harmful if swallowed.
Inhalation	Mist may cause irritation involving the nose, throat and upper respiratory tract during the end use of the product such as during a spray application.

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 (male/female combined Rat) > 1.18 mg/l Exposure time: 4 h Determined in the form of dust. Highest attainable concentration. (actual)
Acute dermal toxicity	LD50 (male/female combined Rabbit) > 2,000 mg/kg
Skin irritation	slight irritation (Rabbit)
Eye irritation	Mild eye irritation. (Rabbit)
Sensitisation	Non-sensitizing. (Guinea pig)

Assessment STOT Specific target organ toxicity – repeated exposure

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

Assessment mutagenicity

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

Assessment carcinogenicity

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

ACGIH

Crystalline quartz (respirable)	14808-60-7	Group A2
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NTP

Crystalline quartz (respirable)	14808-60-7
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IARC

Crystalline quartz (respirable)	14808-60-7	Overall evaluation: 1
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OSHA

None.

Assessment toxicity to reproduction

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 Cyfluthrin is related to parental toxicity.

Assessment developmental toxicity

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

Further information

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 0.00047 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient cyfluthrin.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0.00016 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient cyfluthrin.
Toxicity to aquatic plants	IC50 (Desmodesmus subspicatus (green algae)) > 10 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient cyfluthrin.
Biodegradability	Cyfluthrin: Not rapidly biodegradable
Koc	Cyfluthrin: Koc: 64300
Bioaccumulation	Cyfluthrin: Bioconcentration factor (BCF) 506 Does not bioaccumulate.
Mobility in soil	Cyfluthrin: Immobile in soil
Environmental precautions	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 allow to get into surface water, drains and ground water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. 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	Do not contaminate water, food, or feed by disposal. Dispose of contents/container in accordance with local regulation.
Contaminated packaging	Do not re-use empty containers. Rinsed packaging may be acceptable for landfill, otherwise incineration

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will be required in accordance with local regulations.
If burned, stay out of smoke.

SECTION 14: TRANSPORT INFORMATION

TDG

UN number	3077
Labels	9
Packaging group	III
Marine pollutant	Marine pollutant
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CYFLUTHRIN)

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. (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. (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.

Further Information	Exempt from regulation when transported by road or rail, in accordance with TDG Regulations 1.45.1. This exemption provides that this product does not require dangerous goods shipping documentation or safety marks when transported on land by road or rail.
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Freight Classification:	INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN POISON
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SECTION 15: REGULATORY INFORMATION

PCP Registration No. 25673

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

Cyfluthrin 68359-37-5

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Crystalline quartz (respirable) 14808-60-7

US State Right-To-Know Ingredients

Cyfluthrin	68359-37-5	NJ
Crystalline quartz (respirable)	14808-60-7	MN, RI

Canadian Regulations

Canadian Domestic Substance List

Crystalline quartz (respirable) 14808-60-7

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens

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OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

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 - 2 Flammability - 0 Physical Hazard - 0 PPE -

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

Reason for Revision: Revised according to the current Canadian WHMIS standard (WHMIS 2015).

Prepared by the HSE Department of Bayer CropScience Inc. (306)-721-0310.

Revision Date: 02/10/2017

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