SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<table>
<thead>
<tr>
<th>Product name</th>
<th>TEMPO® 20 WP INSECTICIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDS Number</td>
<td>102000007122</td>
</tr>
<tr>
<td>Product code (UVP)</td>
<td>04399757</td>
</tr>
<tr>
<td>PCP Registration No.</td>
<td>25673</td>
</tr>
<tr>
<td>Product Use</td>
<td>Insecticide</td>
</tr>
</tbody>
</table>

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

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)
For Product Information call: 1-888-283-6847

SECTION 2. HAZARDS IDENTIFICATION

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

Emergency Overview
Caution! Harmful if swallowed, inhaled or absorbed through the skin. Keep out of reach of children and animals. Avoid breathing dust or spray mist.

Physical State                  powder
Odor                            aromatic
Appearance                      tan
Exposure routes                 Inhalation, Skin Absorption, Eye contact, Skin contact

Immediate Effects

Eye
Wear protective eyewear. Mild eye irritation. Avoid contact with eyes.

Skin
Mild skin irritant. May cause a transient, localized paresthesia, characterized by tingling, burning or numbness sensation in some individuals. Avoid contact with skin and clothing.

Ingestion
Harmful if swallowed.

Inhalation
Avoid breathing dust or spray mist. 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.
Chronic or Delayed Long-Term

This product is not listed as a carcinogen by ACGIH, NTP, IARC or OSHA. However, it may contain crystalline silica (quartz), a substance which has been listed as a carcinogen by ACGIH, NTP and IARC. Crystalline silica is a naturally-occurring mineral component of many sands and clays. Although the carcinogenic potential of crystalline silica in humans is controversial, it must be considered if it is inhaled under excessive exposure conditions. The respirable portion of the silica that may be contained in this product, however, is small, such that inhalation exposure during anticipated conditions of use is minimal.

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. Pulmonary and respiratory diseases may be aggravated by exposure to respirable crystalline silica.

Potential Environmental Effect

Highly toxic to bees. Toxic to fish and aquatic organisms.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component Name</th>
<th>CAS-No.</th>
<th>Average % by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyfluthrin</td>
<td>68359-37-5</td>
<td>20.00</td>
</tr>
<tr>
<td>Quartz (Silica, Crystalline)</td>
<td>14808-60-7</td>
<td>3.30</td>
</tr>
<tr>
<td>Crystalline quartz (respirable)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 4. FIRST AID MEASURES

#### General

When possible, 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 physician or poison control center immediately.

#### Skin

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.

#### 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.

#### 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.
Notes to physician
Treatment: Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

Flash point: not applicable

Autoignition temperature: Not combustible.

Lower Flammability Limit: not applicable

Upper Flammability Limit: not applicable

Suitable extinguishing media: Water, Dry chemical

Fire Fighting Instructions: Fight fire from upwind position. Evacuate personnel to safe areas. Do not allow run-off from fire fighting to enter drains or water courses.

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. Do not enter confined spaces unless adequately ventilated. Use personal protective equipment.

Methods for cleaning up: Clean contaminated floors and objects thoroughly, observing environmental regulations. Collect and transfer the product into a properly labelled and tightly closed container. Decontaminate tools and equipment following cleanup.

SECTION 7. HANDLING AND STORAGE

Handling procedures: Use only in area provided with appropriate exhaust ventilation.

Keep away from heat and sources of ignition.

Storing Procedures: 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.

Work/Hygienic: Wash thoroughly with soap and water after handling.
SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye/Face Protection
Tightly fitting safety goggles

Hand protection
Chemical resistant nitrile rubber gloves

Body Protection
Long-sleeved shirt and long pants
Shoes plus socks

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.

Exposure Limits

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Standard</th>
<th>Unit</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (Silica, Crystalline)</td>
<td>14808-60-7</td>
<td>Cad BC OEL TWA</td>
<td></td>
<td>0.025 mg/m³</td>
</tr>
<tr>
<td>Cyfluthrin</td>
<td>68359-37-5</td>
<td>OES BCS* TWA</td>
<td></td>
<td>0.01 mg/m³</td>
</tr>
</tbody>
</table>

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>tan</td>
</tr>
<tr>
<td>Physical State</td>
<td>powder</td>
</tr>
<tr>
<td>Odor</td>
<td>aromatic</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>no data available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>18.0 - 26 lb/ft³</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>no data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Melting / Freezing Point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Water solubility</td>
<td>dispersible</td>
</tr>
<tr>
<td>Minimum Ignition Energy</td>
<td>no data available</td>
</tr>
</tbody>
</table>
Partition coefficient: n-octanol/water  no data available
Viscosity not applicable

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid  Heat, flames and sparks.
Exposed to moisture.

Incompatibility  Methanol
Alkali metals
Alkaline earth metals
Bases
Light metals

Chemical Stability  Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the active ingredient, cyfluthrin.

Acute oral toxicity  male rat: LD50: 3,084 mg/kg
female rat: LD50: 1,733 mg/kg

Acute dermal toxicity  male/female combined rabbit: LD50: > 2,000 mg/kg

Acute inhalation toxicity  male/female combined rat: LC50: > 1.18 mg/l
Exposure time: 4 h
Determined in the form of dust.
Highest attainable concentration.
(actual)
male/female combined rat: LC50: > 4.72 mg/l
Exposure time: 1 h
Determined in the form of dust.
Highest attainable concentration.
Extrapolated from the 4 hr LC50.
(actual)

Skin irritation  rabbit: Slight irritation

Eye irritation  rabbit: Mild eye irritation.

Sensitisation  guinea pig: Non-sensitizing.
Chronic toxicity
The toxic effects of Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

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

ACGIH
Quartz (Silica, Crystalline) 14808-60-7 Group A2
NTP
None.
IARC
None.
OSHA
None.

Reproductive toxicity
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.

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

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

SECTION 12. ECOLOGICAL INFORMATION

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

General Disposal Guidance
Do not contaminate water, food, or feed by disposal. Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility. Pesticide wastes are acutely toxic and hazardous.

Container Disposal
Do not re-use empty containers. Not completely emptied packagings should be disposed of as hazardous waste.

SECTION 14. TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

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

SECTION 15. REGULATORY INFORMATION

PCP Registration No. 25673
US Federal Regulations
TSCA list
Quartz (Silica, Crystalline) 14808-60-7
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 10,000lbs

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
Cyfluthrin 68359-37-5 NJ
Quartz (Silica, Crystalline) 14808-60-7 MN

Canadian Regulations
Canadian Domestic Substance List
Quartz (Silica, Crystalline) 14808-60-7

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)
Cyfluthrin  68359-37-5
Quartz (Silica, Crystalline)  14808-60-7

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):
Health - 2  Flammability - 1  Instability - 1  Others - none

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: Reviewed and updated for general editorial purposes.

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

Revision Date: 05/08/2013

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.