1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Product Name: TEMPO 20 WP
Synonyms: TEMPO POULTRY
SDS Number: 122000007062

Use: Pesticide

Company
BAYER HEALTHCARE LLC
Animal Health Division
12707 Shawnee Mission Parkway
(West 63rd)
Shawnee, KS  66216-1846
USA
(800) 633-3796

In case of emergency:
(800) 422-9874
Chemtrec: (800) 424-9300
BAYER INFORMATION PHONE:(800) 633-3796
INTERNATIONAL:(703) 527-3887

2. HAZARDS IDENTIFICATION

Emergency Overview

May be harmful if inhaled.  May cause respiratory tract irritation.  May irritate skin.  May cause eye irritation.  May cause lung damage.

GHS Classification:

Acute toxicity (Oral) : Category 4
Acute toxicity (Inhalation): Category 4
Skin irritation : Category 2
Eye irritation : Category 2
Specific target organ toxicity - repeated exposure : Category 2

GHS Label element:

Hazard pictograms :
SAFETY DATA SHEET
TEMPO 20 WP
Version 2.0
Revision Date 04/20/2015

Signal word
: Warning

Hazard statements
: H302 + H332 Harmful if swallowed or if inhaled
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements
: Prevention:
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P314 Get medical advice/ attention if you feel unwell.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P391 Collect spillage.

Other hazards which do not result in classification:
None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients:

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - 7%</td>
<td>Quartz</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>21.05%</td>
<td>Cyfluthrin</td>
<td>68359-37-5</td>
</tr>
<tr>
<td>40 - 70%</td>
<td>Magnesium aluminum silicate</td>
<td>12174-11-7</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General advice: Take off all contaminated clothing immediately.

If inhaled: Remove to fresh air. If symptoms persist, call a physician.

In case of skin contact: After contact with skin, wash immediately with plenty of soap and water. If skin reactions occur, contact a physician.

In case of eye contact: In the case of contact with eyes, rinse immediately with plenty of water and
seek medical advice.

If swallowed: If swallowed, seek medical advice immediately and show this container or label.

Contact Number: Use the Bayer Emergency Number in Section 1

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Any

Specific hazards during firefighting: Fire may cause evolution of: Carbon monoxide (CO) Carbon dioxide (CO2)

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment.

Methods for cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Additional advice: Avoid dust formation.

Further Accidental Release Notes: Avoid dust formation.

7. HANDLING AND STORAGE

Handling:
Avoid dust formation. Only handle product with local exhaust ventilation. Avoid contact with skin, eyes and clothing.

No special protective measures against fire required.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Quartz (14808-60-7)
US. ACGIH Threshold Limit Values
Time Weighted Average (TWA): 0.025 mg/m³ (Respirable fraction.)
US. NIOSH: Pocket Guide to Chemical Hazards
Recommended exposure limit (REL): 0.05 mg/m³ (Respirable dust.)

Respiratory protection:
Recommended Filter type: HEPA

Hand protection:
Chemically resistant gloves.

Eye protection:
Safety glasses

Other protective measures:
Wear suitable protective equipment.
Please consult label for end-user requirements.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Powder</td>
</tr>
<tr>
<td>Colour</td>
<td>brown</td>
</tr>
<tr>
<td>Odour</td>
<td>weak, aromatic</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Density</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>1,123 - 1,460 kg/m³</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Flow time</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Surface tension</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Miscibility with water</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>insoluble</td>
</tr>
<tr>
<td>pH</td>
<td>9.2 at 10 g/l</td>
</tr>
<tr>
<td>pH of Aqueous suspension</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>No applicable information is available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No applicable information is available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Conditions to avoid: Do not allow product to come in contact with:
Heat
Exposure to moisture

Materials to avoid: Alkali metals, Alkaline earth metals, Bases, Alcohols

Hazardous reactions: No data available

Thermal decomposition:
No data available

Hazardous decomposition products:
Carbon monoxide (CO), Carbon dioxide (CO2)

Oxidizing properties:
No statements available.

Impact sensitivity:
No data available

Further information: The following applies in general to flammable organic substances and preparations: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

11. TOXICOLOGICAL INFORMATION

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

Acute inhalation toxicity:
LC50 Rat: > 1.18 mg/l, 4 h

Acute dermal toxicity:
LD50 Rabbit: > 2,000 mg/kg

Skin irritation:
Rabbit
Result: Mild skin irritation

Eye irritation:
Rabbit
Result: Mild eye irritation
Sensitisation:
Guinea pig
Result: Does not cause skin sensitisation.

Carcinogenicity:

Quartz
  Magnesium aluminum silicate
  IARC - Evidence of carcinogenicity in humans: Inadequate data.
  IARC - Evidence of carcinogenicity in animals: Inadequate data.
  IARC - Evidence of carcinogenicity in animals: Sufficient data.
  IARC - Overall evaluation: Possibly carcinogenic to humans.
  IARC - Overall evaluation: Not classifiable as to carcinogenicity to humans.

STOT - single exposure:
No data available

STOT - repeated exposure:
Components:

14808-60-7:
Assessment: Causes damage to organs through prolonged or repeated exposure.

12. ECOLOGICAL INFORMATION

General advice:
Do not allow to enter surface waters or groundwater.

Toxicity to fish:
Cyfluthrin
Acute Fish toxicity: LC50 0.00047 mg/l
Test species: Oncorhynchus mykiss (rainbow trout) Duration of test: 96 h

Acute Fish toxicity: LC50 0.0032 mg/l
Test species: Leuciscus idus (Golden orfe) Duration of test: 96 h

Acute Fish toxicity: LC50 0.0032 mg/l
Test species: Lepomis macrochirus (Bluegill) Duration of test: 96 h

Toxicity to daphnia and other aquatic invertebrates:
Cyfluthrin
EC50 0.00016 mg/l
Test species: Daphnia magna (Water flea) Duration of test: 48 h

Toxicity to algae:
Cyfluthrin
IC50 > 10 mg/l
tested on: Desmodesmus subspicatus (green algae) Duration of test: 72 h
Toxicity to bacteria:
Cyfluthrin
EC50 > 10,000 mg/l
tested on: activated sludge micro-organism
Method: OECD 209

Biodegradability:
> 70 %, 28 d rapidly biodegradable

Bioaccumulation:
Cyfluthrin

Bioconcentration factor (BCF)
506

Further information on ecology:
Dissolved organic carbon (DOC): 1.840 mg/g

13. DISPOSAL CONSIDERATIONS

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)

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

14. TRANSPORT INFORMATION

Land transport (CFR)
non-regulated

US Sea transport (IMDG)
non-regulated

US Air transport (ICAO / IATA cargo aircraft only)
non-regulated

US Air transport (ICAO / IATA passenger and cargo aircraft)
non-regulated

International IATA
non-regulated

IMDG
non-regulated
15. REGULATORY INFORMATION

Other regulations: No statements available.

FIFRA Status: This product is registered with the EPA under FIFRA.

US. Toxic Substances Control Act: This product is excluded from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

Components: None

SARA Section 311/312 Hazard Categories: Immediate Health Hazard, Delayed Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Components: None

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - 7%</td>
<td>Quartz</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>3 - 7%</td>
<td>Dipropylene Glycol</td>
<td>110-98-5</td>
</tr>
</tbody>
</table>

California Prop. 65

Warning! This product contains chemical(s) known to the State of California to be Carcinogenic.

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - 7%</td>
<td>Quartz</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>40 - 70%</td>
<td>Magnesium aluminum silicate</td>
<td>12174-11-7</td>
</tr>
<tr>
<td>&lt;0.001%</td>
<td>Naphthalene</td>
<td>91-20-3</td>
</tr>
</tbody>
</table>

OSHA Hazcom Standard Rating: Hazardous

16. OTHER INFORMATION

NFPA 704M Rating

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Reactivity 1
Other
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.