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

Product information

Trade name TRIFLOXYSTROBIN WG 50 W U-EU
Product code (UVP) 05584493
Usage Fungicide
Company Bayer CropScience AG
Alfred-Nobel-Straße 50
40789 Monheim am Rhein
Germany
Telefax +49(0)2173-38-7394
Responsible Department Product Safety and Specification Mgmt
+49(0)2173-38-3409/3189 (during business hours only)
Email: MSDS@bayercropscience.com
Emergency telephone nr. +1 (760) 476-3964 (Company 3E for Bayer CropScience)

2. HAZARDS IDENTIFICATION

Risk advice to man and the environment
May cause sensitization by skin contact.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
Water dispersible granules (WG)
Trifloxystrobin 50 % w/w

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No. / EC-No.</th>
<th>Symbol(s)</th>
<th>R-phrase(s)</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trifloxystrobin</td>
<td>141517-21-7</td>
<td>Xi, N</td>
<td>R43, R50/53</td>
<td>50,00</td>
</tr>
<tr>
<td>Dibutyl naphthalenesulfonic acid, sodium salt</td>
<td>25417-20-3</td>
<td>Xn</td>
<td>R20/22, R36/38, R52/53</td>
<td>&gt; 1,00 - &lt; 25,00</td>
</tr>
<tr>
<td></td>
<td>246-960-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diatomaceaous earth</td>
<td>61790-53-2</td>
<td></td>
<td></td>
<td>&gt; 1,00</td>
</tr>
</tbody>
</table>

For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice
Move out of dangerous area. Remove contaminated clothing immediately and dispose of safely. Place and transport victim in stable position (lying sideways).
Inhalation
Move to fresh air. Keep patient warm and at rest.

Skin contact
Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.

Eye contact
In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.

Ingestion
Do NOT induce vomiting. Rinse mouth. Call a physician or poison control center immediately.

Notes to physician

Treatment
Systemic treatment:
Initial treatment: symptomatic.
In the event of a mouthful or more being ingested, the following measures should be considered:
In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Water spray
Carbon dioxide (CO2)
Foam
Sand

Specific hazards during fire fighting
In the event of fire the following may be released:
Hydrogen cyanide (hydrocyanic acid)
Hydrogen fluoride
Carbon monoxide (CO)
nitrogen oxides (NOx)

Special protective equipment for fire-fighters
In the event of fire and/or explosion do not breathe fumes.
In the event of fire, wear self-contained breathing apparatus.

Further information
Contain the spread of the fire-fighting media.
Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid contact with spilled product or contaminated surfaces.
Use personal protective equipment.

Environmental precautions
Do not allow to get into surface water, drains and ground water.
Methods for cleaning up
Keep in suitable, closed containers for disposal.
Clean contaminated floors and objects thoroughly, observing environmental regulations.
Sweep up or vacuum up spillage and collect in suitable container for disposal.

Additional advice
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

7. HANDLING AND STORAGE

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.

Storage
Requirements for storage areas and containers
Store in a place accessible by authorized persons only.
Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.

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

Temperature tolerance
min. max.
-20 °C 40 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trifloxystrobin</td>
<td>141517-21-7</td>
<td>2.7 mg/m3 (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
</tbody>
</table>

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

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
Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection
Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0.40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination
outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

Eye protection
Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

Skin and body protection
Wear standard coverall and type 3 suit.
Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

Hygiene measures
Avoid contact with skin, eyes and clothing.
Keep working clothes separately.
Wash hands immediately after work, if necessary take a shower.
Remove soiled clothing immediately and clean thoroughly before using again.
Garments that cannot be cleaned must be destroyed (burnt).

9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
- Form: water-dispersible granules
- Colour: light brown
- Odour: weak, characteristic

**Safety data**
- pH: 8.5 - 10.5 at 1 % (23 °C)
- Water solubility: dispersible
- Impact Sensitivity: not impact-sensitive

10. STABILITY AND REACTIVITY

Hazardous reactions
No hazardous reactions when stored and handled according to prescribed instructions.
Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

**Acute oral toxicity**
LD50 (rat) > 2.000 mg/kg
Test conducted with a similar formulation.

**Acute dermal toxicity**
LD50 (rat) > 2.000 mg/kg
Test conducted with a similar formulation.

**Skin irritation**
Slight irritant effect - does not require labelling. (rabbit)
Test conducted with a similar formulation.

**Eye irritation**
Slight irritant effect - does not require labelling. (rabbit)
Test conducted with a similar formulation.
### 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects**

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>LC50 (Rainbow trout (Oncorhynchus mykiss)) 0,036 mg/l</th>
<th>Exposure time: 96 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to aquatic invertebrates</td>
<td>EC50 (Water flea (Daphnia magna)) 0,01 mg/l</td>
<td>Exposure time: 48 h</td>
</tr>
<tr>
<td>Toxicity to aquatic plants</td>
<td>EC50 (Pseudokirchneriella subcapitata) 0,15 mg/l</td>
<td>Growth rate; Exposure time: 72 h</td>
</tr>
</tbody>
</table>

### 13. DISPOSAL CONSIDERATIONS

**Product**

In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

**Waste key for the unused product**

020108 agrochemical waste containing dangerous substances

### 14. TRANSPORT INFORMATION

**ADR/RID/ADNR**

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>3077</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labels</td>
<td>9</td>
</tr>
<tr>
<td>Packaging group</td>
<td>III</td>
</tr>
<tr>
<td>Hazard no.</td>
<td>90</td>
</tr>
<tr>
<td>Description of the goods</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRIFLOXYSTROBIN)</td>
</tr>
<tr>
<td>Tunnel Code</td>
<td>E</td>
</tr>
</tbody>
</table>

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

**IMDG**

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>3077</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labels</td>
<td>9</td>
</tr>
<tr>
<td>Packaging group</td>
<td>III</td>
</tr>
<tr>
<td>EmS</td>
<td>F-A, S-F</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Marine Pollutant</td>
</tr>
</tbody>
</table>
15. REGULATORY INFORMATION

Labelling in accordance with the EC Directive on dangerous preparations 1999/45/EC as amended.

Classification:
Labelling according to EC Directives

Hazardous components which must be listed on the label:
• Trifloxystrobin

Symbol(s)
Xi Irritant
N Dangerous for the environment

R-phrase(s)
R43 May cause sensitization by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)
S24 Avoid contact with skin.
S35 This material and its container must be disposed of in a safe way.
S37 Wear suitable gloves.
S57 Use appropriate container to avoid environmental contamination.

Exceptional labelling
To avoid risks to man and the environment, comply with the instructions for use.

Further information
WHO-classification: III (Slightly hazardous)

16. OTHER INFORMATION

Further information

Text of R-phrases mentioned in Section 3
R20/22 Harmful by inhalation and if swallowed.
R36/38 Irritating to eyes and skin.
R43 May cause sensitization by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
The information given in this Data Sheet has been included in accordance with the guidelines established by Regulation (EC) 1907/2006. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.