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

1.1 Product identifier
Trade name  FUNGUS FIGHTER PLUS
Product code (UVP)  05769077

1.2 Relevant identified uses of the substance or mixture and uses advised against
Use  Fungicide

1.3 Details of the supplier of the safety data sheet
Supplier  SBM Life Science Ltd
Unit 2,
Techno Park,
Newmarket Road,
Cambridge,
CB5 8PB
Great Britain

Telephone  +44 (0)1223 563108
Telefax  +44 (0)1223 851369
Responsible Department  uk.gardenadvice@sbm-company.com
E-mail : sds@corp.sbm-company.com

1.4 Emergency telephone no.
Emergency telephone no. SBM  +1 813-676-1669
UK Emergency telephone no.  +44 (0)800 220 876 (24 hr)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.
Chronic aquatic toxicity: Category 3
H412  Harmful to aquatic life with long lasting effects.

2.2 Label elements
Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.
Hazard label for supply/use required.

Hazardous components which must be listed on the label:
- Trifloxystrobin
- Tebuconazole

Hazard statements
H412  Harmful to aquatic life with long lasting effects.
EUH208  Contains 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one. May produce an allergic reaction.
EUH401  To avoid risks to human health and the environment, comply with the instructions for use.
Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P260 Do not breathe spray.
P271 Use only outdoors or in a well-ventilated area.
P501 Dispose of contents/container to a household waste recycling centre as hazardous waste except for empty containers which can be disposed of by recycling. Contact your local council for details.

2.3 Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Any other liquids (AL)
Trifloxistrobin/Tebuconazole 0.0125:0.0125 %

Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No. / EC-No. / REACH Reg. No.</th>
<th>Classification</th>
<th>Conc. [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trifloxistrobin</td>
<td>141517-21-7</td>
<td>Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
<td>0.0125</td>
</tr>
<tr>
<td>Tebuconazole</td>
<td>107534-96-3 403-640-2</td>
<td>Acute Tox. 4, H302 Repr. 2, H361d Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
<td>0.0125</td>
</tr>
<tr>
<td>Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one</td>
<td>55965-84-9</td>
<td>Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 3, H301 Skin Sens. 1, H317 Skin Corr. 1B, H314 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
<td>&gt; 0.0002 – &lt; 0.0015</td>
</tr>
<tr>
<td>1-Propanol</td>
<td>71-23-8 200-746-9</td>
<td>STOT SE 3, H336 Flam. Liq. 2, H225 Eye Dam. 1, H318</td>
<td>&gt; 1.00</td>
</tr>
</tbody>
</table>

Further information

Trifloxistrobin | 141517-21-7 | M-Factor: 100 (acute) |
Tebuconazole | 107534-96-3 | M-Factor: 1 (acute), 10 (chronic) |

For the full text of the H-Statements mentioned in this Section, see Section 16.
SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

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
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 unless directed to do so by a physician or poison control center. Rinse out mouth and give water in small sips to drink. Keep patient warm and at rest.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment
Local treatment: Initial treatment: symptomatic.
Systemic treatment: Treat symptomatically. 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. There is no specific antidote.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable
High volume water jet

5.2 Special hazards arising from the substance or mixture

Dangerous gases are evolved in the event of a fire.

5.3 Advice for firefighters

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

Further information
Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth.
SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions
Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke.

6.2 Environmental precautions
Do not allow to get into surface water, drains and ground water. If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Clean floors and contaminated objects with plenty of water.

Additional advice
Check also for any local site procedures.

6.4 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.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling
No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Ensure adequate ventilation.

Advice on protection against fire and explosion
No special precautions required.

Hygiene measures
When using, do not eat, drink or smoke. Wash hands immediately after work, if necessary take a shower.

7.2 Conditions for safe storage, including any incompatibilities

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

Suitable materials
HDPE (high density polyethylene)

7.3 Specific end use(s)
Refer to the label and/or leaflet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 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</td>
<td>SK-SEN</td>
<td></td>
</tr>
<tr>
<td>Tebuconazole</td>
<td>107534-96-3</td>
<td>0.2 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8.2 Exposure controls

Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004). Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.

Personal protective equipment

In normal use conditions personal protective equipment is not deemed to be necessary. If there is a potential for excessive exposure the following applies:

**Respiratory protection**

Respiratory protection is not required under anticipated circumstances of exposure. 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**

Personal protective equipment is not normally required. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

**Material**

Nitrile rubber

**Rate of permeability**

> 480 min

**Glove thickness**

> 0.4 mm

**Protective index**

Class 6

**Directive**

Protective gloves complying with EN 374.

**Eye protection**

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

**Skin and body protection**

Personal protective equipment is not normally required. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered.

Wear standard coveralls and Category 3 Type 6 suit.

If there is a risk of significant exposure, consider a higher protective
type 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid, slightly turbid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless to light brown</td>
</tr>
<tr>
<td>Odour</td>
<td>Alcohol-like</td>
</tr>
<tr>
<td>pH</td>
<td>5.0 - 6.0 at 100 % (23 °C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>69.5 °C at 1,013.3 hPa</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>&gt; 667 °C</td>
</tr>
<tr>
<td>Density</td>
<td>ca. 1.00 g/cm³ at 20 °C</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Soluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Trifloxystrobin: log Pow: 4.5 at 25 °C</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tebuconazole: log Pow: 3.7</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>1.116 mm²/s at 20 °C</td>
</tr>
<tr>
<td></td>
<td>0.726 mm²/s at 40 °C</td>
</tr>
<tr>
<td>Surface tension</td>
<td>46.7 mN/m</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No oxidizing properties</td>
</tr>
<tr>
<td>Explosivity</td>
<td>Not explosive</td>
</tr>
<tr>
<td></td>
<td>92/69/EEC, A.14 / OECD 113</td>
</tr>
</tbody>
</table>

9.2 Other information
Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Thermal decomposition
Stable under normal conditions.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions when stored and handled according to prescribed instructions.
10.4 Conditions to avoid
- Extremes of temperature and direct sunlight.

10.5 Incompatible materials
- Store only in the original container.

10.6 Hazardous decomposition products
- No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

**Acute oral toxicity**
- LD50 (Rat) >= 5,000 mg/kg

**Acute inhalation toxicity**
- LC50 (Rat) > 5,604 mg/l
  - Exposure time: 4 h

**Acute dermal toxicity**
- LD50 (Rat) > 2,000 mg/kg

**Skin irritation**
- No skin irritation (Rabbit)

**Eye irritation**
- No eye irritation (Rabbit)

**Sensitisation**
- Non-sensitizing. (Mouse)
  - OECD Test Guideline 429, local lymph node assay (LLNA)

**Assessment repeated dose toxicity**
- Trifloxystrobin did not cause specific target organ toxicity in experimental animal studies.
- Tebuconazole did not cause specific target organ toxicity in experimental animal studies.

**Assessment mutagenicity**
- Trifloxystrobin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
- Tebuconazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment carcinogenicity**
- Trifloxystrobin was not carcinogenic in lifetime feeding studies in rats and mice.
- Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Liver. The mechanism of tumour formation is not considered to be relevant to man.

**Assessment toxicity to reproduction**
- Trifloxystrobin 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 Trifloxystrobin is related to parental toxicity.
- Tebuconazole 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 Tebuconazole is related to parental toxicity.

**Assessment developmental toxicity**
- Trifloxystrobin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Trifloxystrobin are related to maternal toxicity.
- Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations.
SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

**Toxicity to fish**

- LC50 (Oncorhynchus mykiss (rainbow trout)) 4.4 mg/l
  Exposure time: 96 h
  The value mentioned relates to the active ingredient tebuconazole.

- LC50 (Oncorhynchus mykiss (rainbow trout)) 0.015 mg/l
  Exposure time: 96 h
  The value mentioned relates to the active ingredient trifloxystrobin.

**Toxicity to aquatic invertebrates**

- EC50 (Daphnia magna (Water flea)) 86 mg/l
  Exposure time: 48 h

**Chronic toxicity to aquatic invertebrates**

- NOEC (Daphnia (water flea)): 0.01 mg/l
  Exposure time: 21 d
  The value mentioned relates to the active ingredient tebuconazole.

**Toxicity to aquatic plants**

- EC50 (Raphidocelis subcapitata (freshwater green alga)) 3.8 mg/l
  Growth rate; Exposure time: 72 h
  The value mentioned relates to the active ingredient tebuconazole.

- EC50 (Desmodesmus subspicatus (green algae)) 0.0053 mg/l
  Growth rate; Exposure time: 72 h
  The value mentioned relates to the active ingredient trifloxystrobin.

12.2 Persistence and degradability

**Biodegradability**

- Trifloxystrobin: Not rapidly biodegradable
- Tebuconazole: Not rapidly biodegradable

**Koc**

- Trifloxystrobin: Koc: 2377
- Tebuconazole: Koc: 769

12.3 Bioaccumulative potential

**Bioaccumulation**

- Trifloxystrobin: Bioconcentration factor (BCF) 431
  Does not bioaccumulate.
- Tebuconazole: Bioconcentration factor (BCF) 35 - 59
  Does not bioaccumulate.

12.4 Mobility in soil

**Mobility in soil**

- Trifloxystrobin: Slightly mobile in soils
- Tebuconazole: Slightly mobile in soils

12.5 Results of PBT and vPvB assessment

**PBT and vPvB assessment**

- Trifloxystrobin: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
- Tebuconazole: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

**Additional ecological**

- No other effects to be mentioned.
SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

**Product**
- Do not empty into drains.
- Dispose of unused product in its container at a household waste site (civic amenity site).
- Contact your local council (local authority) for details.

**Contaminated packaging**
- Dispose of empty container in the dustbin.
- Follow advice on product label and/or leaflet.

SECTION 14: TRANSPORT INFORMATION

According to ADN/ADR/UK 'Carriage' Regulations/RID/IMDG/IATA not classified as dangerous goods.

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

14.1 – 14.5 Not applicable.

14.6 Special precautions for user
See sections 6 to 8 of this Safety Data Sheet.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
No transport in bulk according to the IBC Code.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**UK and Northern Ireland Regulatory References**
This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.

**Transport**
- Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No 1348)
- Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No 2367)

**Supply and Use**
- Chemical (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716)
Chemical (Hazard Information and Packaging for Supply) (Northern Ireland) Regulations 2009
Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No 2677)
EH40 Occupational Exposure Limits - Table 1 List of approved workplace exposure limits
Control of Pesticide Regulations 1986
Dangerous Substances and Explosive Atmospheres Regulations 2002

Waste Treatment
Environmental Protection Act 1990, Part II
Environmental Protection (Duty of Care) Regulations 1991
The Waste Management Licensing Regulations 1994 (as amended)
Hazardous Waste Regulations 2005 (Replacing Special Waste Regulations 1996 as amended)
Landfill Directive
Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94)
Water Resources Act 1991
Anti-Pollution Works Regulations 1999

Further information
WHO-classification: III (Slightly hazardous)

15.2 Chemical Safety Assessment
A chemical safety assessment is not required.

SECTION 16: OTHER INFORMATION

Text of the hazard statements mentioned in Section 3
H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms
ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE Acute toxicity estimate
CAS-Nr. Chemical Abstracts Service number
Conc. Concentration
EC-No. European community number
ECx Effective concentration to x %
EH40 WEL Worker Exposure Limit
EINECS European inventory of existing commercial substances
ELINCS European list of notified chemical substances
EN European Standard
The above information is intended to give general health and safety guidance on the storage and transport of the product. It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with. The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

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