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

1.1 Product identifier
Product name : BANNER MAXX
Design code : A6780D

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
Company : Syngenta UK Limited
            CPC4, Capital Park
            Fulbourn, Cambridge
            CB21 5XE
Telephone : (01223) 883400
Telefax : (01223) 882195
Website : www.greencast.co.uk

1.4 Emergency telephone number
: +44 (0) 1484 538444

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EU) 1272/2008

<table>
<thead>
<tr>
<th>Property</th>
<th>Category</th>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Sensitisation</td>
<td>1B</td>
<td>H317</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>1B</td>
<td>H360Df</td>
<td></td>
</tr>
<tr>
<td>Chronic aquatic toxicity</td>
<td>2</td>
<td>H411</td>
<td></td>
</tr>
</tbody>
</table>
### 2.2 Label elements

**Labelling:** Regulation (EC) No. 1272/2008

#### Hazard pictograms

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>:Danger</td>
<td>H317: May cause an allergic skin reaction.</td>
</tr>
<tr>
<td></td>
<td>H360Df: May damage the unborn child. Suspected of damaging fertility.</td>
</tr>
<tr>
<td></td>
<td>H411: Toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

#### Precautions Statements

<table>
<thead>
<tr>
<th>Precautions Statements</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>P102</td>
<td>Keep out of reach of children</td>
</tr>
<tr>
<td>P201</td>
<td>Obtain special instructions before use.</td>
</tr>
<tr>
<td>P280</td>
<td>Wear protective gloves/protective clothing.</td>
</tr>
<tr>
<td>P308/P313</td>
<td>IF exposed or concerned: Get medical advice/attention.</td>
</tr>
<tr>
<td>P391</td>
<td>Collect spillage.</td>
</tr>
<tr>
<td>P501</td>
<td>Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.</td>
</tr>
</tbody>
</table>

#### Supplemental Information

<table>
<thead>
<tr>
<th>Information</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUH401</td>
<td>To avoid risks to human health and the environment comply with the instructions for use.</td>
</tr>
</tbody>
</table>

Hazardous components which must be listed on the label:
- Propiconazole
- Tetrahydrofurfuryl alcohol

### 2.3 Other hazards

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

**Hazardous components**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No. EC-No. Registration number</th>
<th>Classification (67/548/EEC)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrahydrofurfuryl alcohol</td>
<td>97-99-4, 202-625-6</td>
<td>T R61 R62 R36</td>
<td>40 - 50 % WW</td>
</tr>
<tr>
<td>propiconazole</td>
<td>80207-90-1 262-104-4</td>
<td>Xn, N R22 R43 R50/53</td>
<td>14.3 % WW</td>
</tr>
</tbody>
</table>

Version 7 Page 2 of 10
SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control centre or physician, or going for treatment.

Inhalation : Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.

Skin Contact : Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

Eye Contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Medical advice : There is no specific antidote available. Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media - large fires
Use alcohol-resistant foam or water spray.
Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

5.3 Advice for fire-fighters:

Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.
SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions:
Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections
Refer to protective measures listed in sections 7 and 8.
Refer to disposal considerations listed in section 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling
No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities
No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)
Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>Exposure limit(s)</th>
<th>Type of exposure limit</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>propiconazole</td>
<td>8 mg/m3</td>
<td>8 h TWA</td>
<td>SYNGENTA</td>
</tr>
</tbody>
</table>

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

8.2 Exposure controls
Engineering Measures : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.
Where necessary, seek additional occupational hygiene advice.

Protective measures:
The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.

Respiratory protection:
A combination gas, vapor and particulate respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

Hand protection:
Suitable material: nitrile rubber.
Break through time: > 480 min
Glove thickness: 0.5 mm
Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye Protection:
Eye protection is not usually required. Follow any site specific eye protection policies.

Skin and body protection:
Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.) Wear as appropriate: impervious protective suit.
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State : liquid
Form : liquid.
Colour : Yellowish to orange.
Odour : Aromatic, like solvent
Odour Threshold : No data available
pH : 5 - 9 at 1 % w/v
Melting point/range : No data available
Boiling point/boiling range : No data available
Flash point : > 105°C at 997 hPa DIN EN 22719
Evaporation rate : No data available
Flammability (solid, gas) : No data available
Lower explosion limit : No data available
Upper explosion limit : No data available
Vapour pressure : No data available
Relative vapour density : No data available
Density : 1.09 g/cm³ at 20 °C
Solubility in other solvents : No data available
Partition Coefficient : No data available
n-octanol/water : 280 °C
Autoignition temperature : No data available
Viscosity, dynamic : 25.6 mPa.s at 40 °C
 : 59.8 mPa.s at 20 °C
Viscosity, kinematic : No data available
Explosive properties : Not explosive
Oxidizing properties : Not oxidising

9.2 Other information

Surface tension : 37.8 mN/m at 20 °C
 : 38.3 mN/m at 20 °C

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity : No information available.
10.2 Chemical Stability : No information available.
10.3 Possibility of hazardous reactions : No hazardous reactions by normal handling and storage according to provisions.
10.4 Conditions to avoid : No decomposition if used as directed.
10.5 Incompatible materials : No substances are known which lead to the formation of hazardous substances or thermal reactions.
10.6 Hazardous decomposition products : Combustion or thermal decomposition will evolve toxic and irritant vapours.
SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity : LD50 male rat, > 5,050 mg/kg
LD50 female rat, 4,343 mg/kg
The toxicological data has been taken from products of similar composition.

Acute inhalational toxicity : LC50 male and female rat, > 1.08 mg/l , 4 h
The toxicological data has been taken from products of similar composition.

Acute dermal toxicity : LD50 male and female rabbit, > 2,020 mg/kg
The toxicological data has been taken from products of similar composition.

Skin corrosion/irritation : Rabbit: non-irritating.
The toxicological data has been taken from products of similar composition.

Serious eye damage/eye irritation : Rabbit: moderately irritating
The toxicological data has been taken from products of similar composition.

Respiratory or skin sensitisation

Germ cell mutagenicity
propiconazole : Did not show mutagenic effects in animal experiments.

Carcinogenicity
propiconazole : Did not show carcinogenic effects in animal experiments.

Reproductive toxicity
propiconazole : Did not show reproductive toxicity effects in animal experiments.
tetrahydrofurfuryl alcohol

STOT – repeated exposure
propiconazole : May damage the unborn child. Suspected of damaging fertility.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish : LC50 Oncorhynchus mykiss (rainbow trout), 25 mg/l , 96 h
LC50 Lepomis macrochirus (Bluegill sunfish), 36 mg/l , 96 h

Toxicity to aquatic invertebrates : EC50 Daphnia magna Straus, 8.5 mg/l , 48 h

Toxicity to aquatic plants : EbC50 Pseudokirchneriella subcapitata (green algae), 5.6 mg/l , 96 h
ErC50 Pseudokirchneriella subcapitata (green algae), 44 mg/l , 96 h.
NOEC Pseudokirchneriella subcapitata (green algae), 0.46 mg/l , 96 h

12.2 Persistence and degradability

Biodegradability : propiconazole : Not readily biodegradable
Stability in water : Degradation half life: 28 - 64 d
Stable in water
Stability in soil : Degradation half life: 66 - 170 d
Not persistent in soil

12.3 Bioaccumulative potential

propiconazole : Low to medium mobility in soil.

12.4 Mobility in soil

propiconazole : Low to medium mobility in soil.

12.5 Results of PBT and vPvB assessment

propiconazole : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
This substance is not considered to be very persistent nor very bioaccumulating
12.6 Other adverse effects

None known.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging: Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)

<table>
<thead>
<tr>
<th>14.1 UN Number</th>
<th>UN 3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROPICONAZOLE)</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td>9</td>
</tr>
<tr>
<td>14.4 Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>Environmentally hazardous</td>
</tr>
<tr>
<td>Labels</td>
<td>9</td>
</tr>
</tbody>
</table>

Sea transport (IMDG)

<table>
<thead>
<tr>
<th>14.1 UN Number</th>
<th>UN 3082</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>14.4 Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>Marine pollutant</td>
</tr>
<tr>
<td>Labels</td>
<td>9</td>
</tr>
</tbody>
</table>

Air transport (IATA-DGR)

<table>
<thead>
<tr>
<th>14.1 UN Number</th>
<th>UN 3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
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<td>9</td>
</tr>
<tr>
<td>14.4 Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td>none</td>
</tr>
<tr>
<td>Labels</td>
<td>9</td>
</tr>
</tbody>
</table>

14.6 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

GHS-Labelling

<table>
<thead>
<tr>
<th>Hazard pictograms</th>
<th>Signal Word</th>
<th>Hazard Statements</th>
<th>Precautions Statements</th>
<th>Supplemental Information</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>:Danger</td>
<td>:H317 May cause an allergic skin reaction.</td>
<td>:P102 Keep out of reach of children</td>
<td>:EUH401 To avoid risks to human health and the environment comply with the instructions for use.</td>
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<td></td>
<td></td>
<td>:H317 May damage the unborn child. Suspected of damaging fertility.</td>
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<td></td>
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<td>:H360Df Toxic to aquatic life with long lasting effects.</td>
<td>:P280 Wear protective gloves/protective clothing.</td>
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<td></td>
</tr>
</tbody>
</table>

Hazardous components which must be listed on the label:
- Propiconazole

15.2 Chemical Safety Assessment
A Chemical Safety Assessment is not required for this substance.

SECTION 16. OTHER INFORMATION

Approval number, MAPP 13167; PCS No. 02715.

Use plant protection products safely. Always read the label and product information before use. Based upon SDS release dated 08/09/2014, version 7 with local amendment.

Full text of H-Statements referred to under sections 2 and 3.

- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H360Df May damage the unborn child. Suspected of damaging fertility.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
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.

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