

## HERITAGE

Version 11 - This version replaces all previous versions.

Revision Date 08.08.2013

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

#### 1.1 Product identifier

**Product name** : HERITAGE

**Design code** : A12704A

#### 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](http://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

Acute aquatic toxicity Category 1 H400

Chronic aquatic toxicity Category 1 H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

N, Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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### 2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms



Signal Word	:Warning	
Hazard Statements	:H410	Very toxic to aquatic life with long lasting effects.
Precautions Statements	:P273	Avoid release to the environment.
	:P391	Collect spillage.
	:P501	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.
Supplemental Information	: EUH401	To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label:

Labelling: EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)



DANGEROUS FOR THE ENVIRONMENT

R-phrase(s)	:R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	S2	Keep out of the reach of children
	S13	Keep away from food, drink and animal feedingstuffs
	S20/21	When using do not eat, drink or smoke
	S35	This material and its container must be disposed or in a safe way
	S57	Use appropriate containment to avoid environmental contamination
Special labelling of certain mixtures		To avoid risks to man and the environment, comply with instructions for use.

### 2.3 Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous components

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Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration
azoxystrobin	131860-33-8	T, N R23 R50/53	Acute Tox.3; H331 Aquatic Acute1; H400 Aquatic Chronic1; H410	50 % W/W
naphthalenesulfonic acid, dimethyl-, polymer with formaldehyde and methyl- naphthalenesulfonic acid, sodium salt		Xi R36/38	Eye Irrit.2; H319 Skin Irrit.2; H315	1 - 10 % W/W
sulfuric acid, mono-C12-18-alkyl esters, sodium salts	68955-19-1 273-257-1	Xi R38 R41	Skin Irrit.2; H315 Eye Dam.1; H318	1 - 5 % W/W

Substances for which there are Community workplace exposure limits.

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

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

- General advice** : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center 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. FIRE-FIGHTING 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.

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- 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:**  
Do not flush into surface water or sanitary sewer system.
- 6.3 Methods and materials for containment and cleaning up**  
Contain and collect spillage with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local (see section 13). Do not create a powder cloud by using a brush or compressed air. Clean contaminated surface thoroughly. If the product contaminates rivers and lakes or drains inform respective authorities.
- 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

Components	Exposure limit(s)	Type of exposure limit	Source
azoxystrobin	2 mg/m <sup>3</sup>	8 h TWA	SYNGENTA

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

#### 8.2 Exposure controls

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<b>Engineering measures</b>	:	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 dust is 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.
<b>Protective measures</b>	:	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.
<b>Respiratory protection</b>	:	No personal respiratory protective equipment normally required. A particulate filter respirator may be necessary until effective technical measures are installed.
<b>Hand protection</b>	:	Chemical resistant gloves are not usually required. Select gloves based on the physical job requirements
<b>Eye protection</b>	:	Eye protection is not usually required. Follow any site specific eye protection policies.
<b>Skin and body protection</b>	:	No special protective equipment required. Select skin and body protection based on the physical job requirements.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Physical State</b>	:	Solid
<b>Form</b>	:	Granules
<b>Colour</b>	:	yellow to light brown
<b>Odour</b>	:	characteristic
<b>Odour Threshold</b>	:	No data available
<b>pH</b>	:	4 – 8 at 1 % w/v (aqueous suspension)
<b>Melting point/range</b>	:	No data available
<b>Boiling point/boiling range</b>	:	No data available
<b>Flash point</b>	:	No data available
<b>Evaporation rate</b>	:	No data available
<b>Flammability (solid, gas)</b>	:	Not highly flammable
<b>Lower explosion limit</b>	:	No data available
<b>Upper explosion limit</b>	:	No data available
<b>Vapour pressure</b>	:	No data available
<b>Relative vapour density</b>	:	No data available
<b>Density</b>	:	0.54 g/cm <sup>3</sup>
<b>Solubility in other solvents</b>	:	No data available
<b>Partition Coefficient n-octanol/water</b>	:	No data available
<b>Autoignition temperature</b>	:	No data available
<b>Thermal decomposition</b>	:	No data available
<b>Viscosity, dynamic</b>	:	No data available
<b>Viscosity, kinematic</b>	:	No data available
<b>Explosive properties</b>	:	Not explosive
<b>Oxidizing properties</b>	:	Not oxidising

### 9.2 Other Information

: No data available

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### SECTION 10. STABILITY AND REACTIVITY

- |  |   |   |
|--|---|---|
| <b>10.1 Reactivity</b>                         | : | No information available  |
| <b>10.2 Chemical Stability</b>                 | : | No information available  |
| <b>10.3 Possibility of hazardous reactions</b> | : | None known. Hazardous polymerisation does not occur.                        |
| <b>10.4 Conditions to avoid</b>                | : | No information available  |
| <b>10.5 Incompatible materials</b>             | : | No information available  |
| <b>10.6 Hazardous decomposition products</b>   | : | Combustion or thermal decomposition will evolve toxic and irritant vapours. |

### SECTION 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

- |  |   |   |
|--|---|---|
| <b>Acute oral toxicity</b>                   | : | LD50 male and female rat, > 5,000 mg/kg<br>The toxicological data has been taken from products of similar composition.            |
| <b>Acute inhalational toxicity</b>           | : | LC50 rat, > 4.67 mg/l, 4 h<br>The toxicological data has been taken from products of similar composition.                         |
| <b>Acute dermal toxicity</b>                 | : | LD50 male and female rat, > 2,000 mg/kg<br>The toxicological data has been taken from products of similar composition.            |
| <b>Skin corrosion/irritation</b>             | : | rabbit: Non-irritating<br>The toxicological data has been taken from products of similar composition.                             |
| <b>Serious eye damage/eye irritation</b>     | : | rabbit: Non-irritating<br>The toxicological data has been taken from products of similar composition.                             |
| <b>Respiratory or skin sensitisation</b>     | : | guinea pig: Not a skin sensitizer in animal tests.<br>The toxicological data has been taken from products of similar composition. |
| <b>Germ cell mutagenicity azoxystrobin</b>   | : | Did not show mutagenic effects in animal experiments.   |
| <b>Carcinogenicity azoxystrobin</b>          | : | Did not show carcinogenic effects in animal experiments.  |
| <b>Reproductive toxicity azoxystrobin</b>    | : | Did not show reproductive toxicity effects in animal experiments.   |
| <b>STOT – repeated exposure azoxystrobin</b> | : | No adverse effect has been observed in chronic toxicity tests.  |

### SECTION 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

- |  |   |  |
|--|---|--|
| <b>Toxicity to fish</b>                  | : | LC50 <i>Oncorhynchus mykiss</i> (rainbow trout), 1.1 mg/l, 96 h<br>LC50 <i>Lepomis macrochirus</i> (Bluegill sunfish), 2.4 mg/l, 96 h                      |
| <b>Toxicity to aquatic invertebrates</b> | : | EC50 <i>Daphnia magna</i> (water flea), 0.0018 mg/l, 48 h  |
| <b>Toxicity to aquatic plants</b>        | : | EbC50 <i>Pseudokirchneriella subcapitata</i> (green algae), 0.12 mg/l, 72 h<br>ErC50 <i>Pseudokirchneriella subcapitata</i> (green algae), 0.95 mg/l, 72 h |

#### 12.2 Persistence and degradability

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### Biodegradability

azoxystrobin : Not readily biodegradable.

### Stability in water

azoxystrobin : Degradation half life: 214 d, Stable in water

### Stability in soil

azoxystrobin : Degradation half life: 80 d. Not persistent in soil

### 12.3 Bioaccumulative potential

azoxystrobin : Does not bioaccumulate.

### 12.4 Mobility in soil

azoxystrobin : azoxystrobin has low to very high mobility in soil.

### 12.5 Results of PBT and vPvB assessment

azoxystrobin : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

### 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)

14.1	UN Number	:	UN 3077
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(AZOXYSTROBIN)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	;	III
Labels		:	9
14.5	Environmental hazards	:	Environmentally hazardous

### Sea transport(IMDG)

14.1	UN Number	:	UN 3077
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(AZOXYSTROBIN)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	;	III
Labels		:	9
14.5	Environmental hazards	:	Marine Pollutant

### Air transport (IATA-DGR)

14.1	UN Number	:	UN 3077
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14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(AZOXYSTROBIN)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	;	III
	Labels	:	9
14.6	Special precautions for user	:	none

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
not applicable

## SECTION 15. REGULATORY INFORMATION

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

#### GHS-Labeling

Hazard pictograms		
		
Signal Word	:	Warning
Hazard Statements	:	H410 Very toxic to aquatic life with long lasting effects.
Precautions Statements	:	P273 Avoid release to the environment. P391 Collect spillage. P501 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.
Supplemental Information	:	EUH401 To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label:

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

## SECTION 16. OTHER INFORMATION

Approval number, MAPP 13536.

Use plant protection products safely. Always read the label and product information before use.

Based upon SDS release dated 08/08/2013, version 11 with local amendment.

Full text of R-phrases referred to under sections 2 and 3:

R23	Toxic by inhalation.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



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

H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very 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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