

PRODUCT SAFETY DATA SHEET

SUBSTANCE / PREPARATION NAME

HEROS

Date of preparation	17/06/2011
Release Date	22/06/2011
MSDS No	FORM_MSDS_R&D_016_00
Renewal Date/No	

Page Number: 1/8

This form is based on SAFETY DATA FORMS AND REGULATION ABOUT THE PREPARATION AND DISTRIBUTION OF HAZARDOUS SUBSTANCES (dated 26/12/2008 and 27092 numbered).

1. SUBSTANCE/PREPARATION AND COMPANY/ DEFINITION OF BUSINESS

OWNER:

1.1 Substance/ Presentation Of The Preparation:

Product Name : HEROS
Product Description : AZOXYSTROBIN 250 G/L
Formulation Type : SC (Suspension Concantrate)
Cas No : 131860-33-8
EC No : -
FRAC : 11, C3 QoI; strobilurin type: methoxyacrylate

1.2 Usage of Substance/Preparation:

Fungicide

1.3 Presentation of the Company:

Manufacturer and Licensee Company:

Company Name : AGRİ SCIENCES TARIM VE İLAÇ ÜR. SAN. TİC. LTD. ŞTİ.
Adress : Bekir Saydam Caddesi Pancar No: 31 Torbalı / İZMİR
Telephone : +90 0232 864 13 33
Fax : +90 0232 864 16 79

1.4 Emergency Telephone:

Please call +90 0232 864 13 33 in an emergency.

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2. INFORMATION ABOUT THE CONTENT/COMPOSITION :

Substance	g/L	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
Azoxystrobin	250	131860-33-8	-	T,N	R23, R50, R53	T; R23, N; R50, R53
Diethylene Glycol	200	111-46-46	203-872-2	Xn	R22	-
Others	These are excluded because of not containing hazardous substance.					

- Descriptions about ¹R are given in chapter 16.

3. IDENTIFICATION OF HAZARDS:



T: Toxic

R23

R50

R53

: Toxic by inhalation.

: Very toxic to aquatic organisms.

: May cause long-term adverse effects in aquatic environments.



N: Dangerous for the environment

4. First Aid Precautions:

Symptoms of Poisoning: There are not any specific symptom.

First Aid Precautions: In the poisoning case remove the patient from the sprayed field, If he/she is at closed area, you must immediately send him to fresh air. If it is contacted with eye, flush eyelids slowly for 15 minutes. If necessary, consult to a doctor with medication.

Antidote: There is not specific antidote. In the case of poisoning, call the international poison center.

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5. FIRE CONFLICT PRECAUTIONS

Required Personal Protective Equipment in Aid: Do not breathe fumes of explosion and fire. If possible, use self contained breathing apparatus during fire.

Hazards: Formation of dangerous gases is taken into account in case of fire.

Fire Extinguishers: Foam, carbon dioxide, extinguishing powder.

Other Informations: Remove the product from fire areas, cool containers with water. If possible, use sand or earth after fire fighting water.

6. ACCIDENTAL RELEASE PRECAUTIONS:

General Information: Use personal protection devices, specified in section 8.

Personal Alerts: Avoid contact with spilled product or contaminated areas. Do not eat, drink or smoke when dealing with spilled product.

The Cleaning Process: The product is collected with liquid retaining material (such as peat, sawdust, chemical binder. Substance collected into hard plastic containers and stored in a secure way until to destroy. Contaminated substances, cleaned according to environment and ground instructions. The product flowing to drains or sewers is blocked. If waste is mixed with water, it is reported to the authorities.

Additional Precautions: Look at section 7 for safe use. Look at section 8 for personal protective equipment. Look at section 13 for disposal.

7. HANDLING AND STORAGE

Handling : Use personal protective equipments specified in section 8. Do not eat or drink anything during the usage. Avoid contact with skin and eyes. Do not breathe it. Wash your hands after usage. It does not need any other security precautions other than instructions on it. Use only the rooms with appropriate exhaust ventilation.

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Storage : Store in original container in a cool, dry and well-ventilated place. Keep away from foods, drinks and animal feedstuffs. Protect from direct sunlight. Protect against freezing, do not put to reach area of children.

The storage temperature 0-30° C

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Precautions: Keep the substance concentration below the allowable limits by providing the appropriate general or regional ventilation.

Personal Protective Equipment:

Eye : Use safety glasses according to EN 166.

Skin : Use protective clothing and suitable gloves. If possible, use 2 layers of clothing. Use CE marked Nitrile rubber gloves (min 0,40 mm thick). Wash contaminated gloves. Dispose of the not cleanable gloves.

Respiration: Use breathing apparatus according to EN 149:2001. Breathing apparatus only used in short-term works to reduce the risk, for example, in local ventilations. Warning instructions prepared by manufacturers about respiratory protection apparatus must be followed.

Hygiene Precautions: Do not eat, drink or smoke during usage. Wash your hands every time before going to the toilet, eating, drinking and smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid, viskose

Color : Beige-brown

Smell : Odourless

Density : $1,1 \pm 0,05 \text{ g/cm}^3$ (20°C)

pH : 6-9 10% (20°C)

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10. STABILITY AND REACTION

Conditions to avoid : Extereme temperatures and direct sunlight.

Substances to avoid : Avoid from strong acids and bases.

Hazardous reactions : There is not hazardous reactions when stored and handled suitable. Resistant to storage conditions. Hazardous polymerization products does not occur.

11. TOXICOLOGICAL INFORMATION

Azoxystrobin Technical Substance:

Oral Acute oral LD₅₀ for male and female rats and mice >5000 mg/kg. **Skin and eye Acute** percutaneous LD₅₀ for rats >2000 mg/kg. Slight eye and skin irritation (rabbits). Not a skin sensitiser (guinea pigs). **Inhalation** LC₅₀ (4 h, nose only) for male rats 0.96, female rats 0.69 mg/l. **NOEL** (2 y) for rats 18 mg/kg b.w. daily. **ADI/RfD** (JMPR) 0.2 mg/kg b.w. [proposed]; (EC) 0.1 mg/kg b.w. [1998]; (EPA) RfD 0.18 mg/kg b.w. [1997]. **Other** Not genotoxic, carcinogenic or neurotoxic; azoxystrobin has no effect on fertility parameters nor on foetal or infant development. **Toxicity Class** WHO (a.i.) U.

12. ECOLOGICAL INFORMATION

Azoxystrobin Technical Substance:

Birds Acute oral LD₅₀ for mallard ducks and bobwhite quail >2000 mg/kg. Dietary LC₅₀ (5 d) for bobwhite quail and mallard ducks >5200 mg/kg diet. **Fish** LC₅₀ (96 h) for rainbow trout 0.47, bluegill sunfish 1.1, carp 1.6, sheepshead minnows 0.66 mg/l. **Daphnia** EC₅₀ (48 h) 0.28 mg/l. **Algae** EC₅₀ (120 h) for *Selenastrum capricornutum* 0.12 mg/l; EC₅₀ (72 h) for diatom *Navicula pelliculosa* 0.014 mg/l. **Other aquatic spp.** LC₅₀ (96 h) for mysid shrimps 0.055 mg/l; EC₅₀ (48 h) for Pacific oysters 1.3 mg/l; EC₅₀ (14 d) for *Lemna gibba* 3.2 mg/l; NOEC (25 d) for chironomid larvae 0.2 mg/l. **Bees** LD₅₀ for honeybees (oral) >25 µg/bee; (contact) >200 µg/bee.

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13. DISPOSAL INFORMATION

Product : Wastes should be disposed of with household waste. The remaining amount of waste must not be poured into a sewage canal. Hazardous waste should be disposed of according to control regulations.

Contaminated Packing : Empty containers should be used for other products. Completely emptied and shaken containers must be properly disposed. Uncontaminated packaging should be disposed of as hazardous waste.

14. TRANSPORT INFORMATION

ADR/RID/ADNR

UN-No. : 3082

Hazard Signal : 9

Packaging Group : III

Property of the product : UN 3082 ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID N.O.S. (CONTAINING AZOXYSTROBIN.)

IMDG

UN-No. : 3082

Class : 9

Packaging Group : III

EMS :

Marine Pollutant : Evet

Property of the product : UN 3082 ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID N.O.S. (CONTAINING AZOXYSTROBIN.)

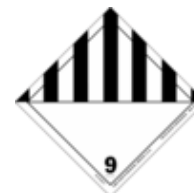
IATA

UN-No. : 3082

Class : 9

Packaging Group : III

Property of the product : UN 3082 ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID N.O.S. (CONTAINING AZOXYSTROBIN.)



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15. REGULATORY INFORMATION

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Hazard Signal and Symbol:



T: Toxic

N: Dangerous for the environment

Hazardous Substances Found On The Label

Containing Azoxystrobine

Risk Phrases

Physicochemical:-

Health:

R23 : Toxic by inhalation.

Environment

R50 : Very toxic to aquatic organisms.

R53 : May cause long-term adverse effects in aquatic environments.

Safety Phrases:

S1/2 : Keep away from children and store under lock.

S13 : Keep away from foods, drinks and animal feedstuffs

S22 : Do not breathe dust.

S29 : Do not empty into drains.

S45 : In case of accident or if you feel unwell seek medical advice immediately

(show the label where possible)

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- S51 : Use only in well-ventilated areas
S 56 : Dispose the material at hazardous or special waste collection point.
S61 : Avoid release to the environment. Refer to special instructions/safety data sheet
S63 : In case of accident by inhalation: remove casualty to fresh air and keep at rest

Important Labeling :

To avoid from risks to man and environment, comply with the instruction of use.

16. OTHER INFORMATIONS

- N** : Dangerous for the environment
T : Toxic
Xn : Harmful

Risk phrases mentioned in Section 2:

- R22 : Harmful if swallowed.
S23 : Toxic by inhalation.
R50 : Very toxic to aquatic organisms.
R53 : May cause long-term adverse effects in aquatic environments.

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Prepared By : Seçil CANAYAKIN

This security information form is additional to manufacturer firm's instructions, however does not replace with instructions. This form contains regulation criterias for preparation of security form preparation. This form is based on safety data forms and regulation about the preparation and distribution of hazardous substances (dated 26/12/2008 and 27092 numbered). Please, the relevant institutions and individuals act according to this regulation.