

PRODUCT SAFETY DATA SHEET

SUBSTANCE / PREPARATION NAME

SPARTA

Date of preparation	13/06/2011
Release Date	18/07/2011
MSDS No	FORM_MSDS_R&D_014_00
Renewal Date/No	

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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. DEFINITION OF SUBSTANCE/PREPARATION AND COMPANY/ BUSINESS OWNER:

1.1 Substance/ Presentation Of The Preparation:

Product Name : SPARTA
Content : TEBUCONAZOLE 25%
Formulation Type : WP (Wettable Powder)

Tebuconazole
Cas No : 107534-96-3
EC No : 403-640-2
FRAC : 3, G1 SBI Class I, DMI: triazole

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.
Address : 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	%	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
Tebuconazole	25	107534-96-3	403-640-2	Repr.Cat.3 Xn, N	R22, R63, R51, R53	Xn; R22, Repr.Cat.3 R63, N; R51, R53
AlkylPhenol poly glycol Ether	2	37205-87-1	-	Xi	R36	-
Others*	-					

- Descriptions about ¹R are given in chapter 16
- It's out of classification in that does not contain dangerous substances.

3. IDENTIFICATION OF HAZARDS:



Xn: HARMFUL

R22

: Harmful if swallowed

R63

: Possible risk of harm to the unborn child

R51

: Toxic to aquatic organisms.

R53

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



N:DANGEROUS FOR THE ENVIRONMENT

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4. FIRST AID PRECAUTIONS:

General Information: The survivors are moved out of dangerous area. In case of danger of fainting during storage and transport securely deposited in the side. Soiled or soaked clothing immediately removed.

Skin contact: Wash off with soap and water.

Eye Contact: Wash eyes with plenty of water. Consult an eye specialist.

Ingestion: Call a doctor immediately.

Information for doctor: See Chapter 11 for information on toxicology.

Chemically active substances specified in Chapter 2 belong to the group:

5. FIRE-FIGHTING MEASURES

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 Information: 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.

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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.

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.

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.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Sold, powder
Color : White
Smell : Characteristic
pH : 8-9,5 1% (20⁰C)
Solubility in water : Dispers

10. STABILITY AND REACTION

Conditions to avoid : Extreme temperatures and direct sunlight.
Substances to avoid : It is possible to occur carbondisulfid and hydro sulfur with acids.

11. TOXICOLOGICAL INFORMATION

Tebuconazole Technical Substance:

Oral Acute oral LD₅₀ for male rats 4000, female rats 1700, mice *c.* 3000 mg/kg.
Skin and eye Acute percutaneous LD₅₀ for rats >5000 mg/kg (in physiological saline solution). Non-irritating to skin; mild irritant to eyes (rabbits). **Inhalation** LC₅₀ (4 h) for rats 0.37 mg/l air (aerosol), >5.1 mg/l (dust). **NOEL** (2 y) for rats 300 mg/kg diet, dogs 100 mg/kg diet (2.95 mg/kg b.w.), mice 20 mg/kg diet. **ADI/RfD** (JMPR) 0.03 mg/kg b.w. [1994]; (EC) 0.03 mg/kg b.w. [2008]; (EPA) 0.03 mg/kg b.w. [1999].

12. ECOLOGICAL INFORMATION

Tebuconazole Technical Substance:

Birds Acute oral LD₅₀ for male Japanese quail 4438, female Japanese quail 2912, bobwhite quail 1988 mg/kg b.w. Dietary LC₅₀ (5 d) for mallard ducks >4816, bobwhite quail >5000 mg/kg feed. **Fish** LC₅₀ (96 h, flow-through) for rainbow trout 4.4, bluegill sunfish 5.7 mg/l. **Daphnia** LC₅₀ (48 h, flow-through) 2.79 mg/l. **Algae** E_rC₅₀ (72 h, static) for *Pseudokirchneriella subcapitata* 3.80 mg/l. **Other aquatic spp.** EC₁₅ (28 d) for *Chironomus riparius* 2.51 mg/l. **Bees** LD₅₀ (48 h, oral) >83 µg/bee; (contact) >200 µg/bee.

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13. DISPOSAL INFORMATION

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

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

14. TRANSPORT INFORMATION

ADR/RID/ADNR

UN-No. : 3077

Danger Signal : 9

Packaging Group : III

Property of the product : UN 3077 Environmental hazardous substance, sold N.O.S. (waste free)(Including Tebuconazole)

IMDG

UN-No. : 3077

Class : 9

Packaging Group : III

See Pollutant : Yes

Property of the product : :UN 3077 Environmental hazardous substance, sold N.O.S. (waste free) (Including Tebuconazole)

IATA

UN-No. : 3077

Class : 9

Packaging Group : III

Property of the product : :UN 3077 Environmental hazardous substance, sold N.O.S. (waste free) (Including Tebuconazole)

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15. REGULATORY INFORMATION

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Hazard Signal and Symbol:



Xn: Harmful



N: Dangerous for the environment

Hazardous Substances Found On The Label: Containing Tebuconazole

Risk Phrases

Physicochemical

Health:

R22 : Harmful if swallowed

R63 : Possible risk of harm to the unborn child

Environment:

R51 : Toxic to aquatic organisms.

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

Safety Phrases:

S1/2 : Keep locked up and out of the reach of children.

S9 : Keep container in a well-ventilated place

S13 : Keep away from food, drink and animal foodstuffs

S 36/37 : Use suitable protective clothing, gloves and protective goggles/mask.

S29 : Do not empty into drains

S46 : If swallowed, seek medical advice immediately and show this container or label

S56 : Dispose of this material and its container at hazardous or special waste collection point

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S61 : Avoid release from the environment. Refer to special instructions / Safety Data Sheet.

Important Labeling :

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

16. Additional Information:

N : Dangerous for the environment
Xn : Harmful
Xi : Irritant

Risk phrases mentioned in Section 2:

R22 : Harmful if swallowed
R36 : Irritating to eyes
R63 : Possible risk of harm to the unborn child
R51 : 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 criteria 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.