

PRODUCT SAFETY DATA SHEET

SUBSTANCE / PREPARATION NAME

DEXTEROUS

Date of preparation	14/07/2011
Release Date	14/07/2011
MSDS No	FORM_MSDS_R&D_027_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 : DEXTEROUS
Product Description : FENHEXAMID 500 g/L
Formulation Type : SC (Suspension Concentrate)
Cas No : 126833-17-8
EC No : 422-530-5
FRAC :17, G3 SBI Class III: hydroxyanilide

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
Fenhexamid	500	126833-17-8	422-530-5	N	R51, R53	N; R51, R53
Others	These are excluded because of not containing hazardous substance.					

- Descriptions about ¹R are given in chapter 16.

3. IDENTIFICATION OF HAZARDS:



N: Dangerous for the environment

R51 : Toxic to aquatic organisms

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

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 : Brown

Smell : Slightly careteristic

Density : $1,17 \pm 0,05 \text{ g/cm}^3$ (20°C)

pH : 6-7,5 1% (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

Fenhexamid Technical Substance:

Oral Acute oral LD₅₀ for rats and mice >5000 mg/kg. **Skin and eye** Acute percutaneous LD₅₀ for rats >5000 mg/kg. Non-irritating to skin and eyes (rabbits). Not a skin sensitiser (guinea pigs). **Inhalation** LC₅₀ (4 h) for rats >5057 mg/m³ air (dust). **NOEL** (24 mo) for rats 500 mg/kg diet (males 28, females 40 mg/kg b.w. daily), mice 800 mg/kg diet (males 247.4, females 364.8 mg/kg b.w. daily); (12 mo) for dogs 500 mg/kg diet (18.3 mg/kg b.w. daily). **ADI/RfD** (JMPR) 0.2 mg/kg b.w. [2005]; (EC) 0.2 mg/kg b.w. [2001]; (company assignment) 0.183 mg/kg b.w.; (EPA) cRfD 0.17 mg/kg [1999]. **Other** Non-teratogenic, non-carcinogenic, non-mutagenic. **Toxicity Class** WHO (a.i.) U. **EC classification** N; R51, R53

12. ECOLOGICAL INFORMATION

Fenhexamid Technical Substance:

Birds LD₅₀ for bobwhite quail >2000 mg/kg. Dietary LC₅₀ for bobwhite quail and mallard ducks >5000 ppm of feed. **Fish** LC₅₀ (96 h) for rainbow trout 1.34, bluegill sunfish 3.42 mg/l. **Daphnia** EC₅₀ (48 h) >18.8 mg/l. **Algae** E_rC₅₀ (120 h) for *Selenastrum capricornutum* 8.81 mg/l. E_rC₅₀ (72 h) for *Scenedesmus subspicatus* >26.1 mg/l. **Other aquatic spp.** NOEC (28 d) for *Chironomus riparius* 100 mg/l; EC₅₀ (14 d) for *Lemna gibba* 2.3 mg/l. **Bees** LD₅₀ (oral and contact) >200 µg/bee. **Worms** LC₅₀ (2 w) for *Eisenia foetida* >1000 mg/kg dry soil.

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Other beneficial spp. Not toxic to predatory mites (*Typhlodromus pyri*), rove beetles (*Aleochara bilineata*), ladybirds (*Coccinella septempunctata*) and parasitoids (*Aphidius rhopalosiphi*), at 2 kg/ha. No adverse effect on microbial mineralisation.

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 Packaging : 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 FENHEXAMIDE.)

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 FENHEXAMIDE.)

IATA

UN-No. : 3082

Class : 9

Packaging Group : III

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



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15. REGULATORY INFORMATION

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Hazard Signal and Symbol:



N: Dangerous for the environment

Hazardous Substances Found On The Label

Containing Fenhexamide.

Risk Phrases

Physicochemical:-

Health:-

Environment

R51 : 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

S 29 :Do not pour into sewer system.

S 36/37/39 :Use suitable protective clothing, gloves and protective goggles/mask.

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

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Important Labeling :

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

16. OTHER INFORMATIONS

N : Dangerous for the environment

Risk phrases mentioned in Section 2:

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 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.