

MATERIAL SAFETY DATA SHEET

MATERIAL

EFFICURE 75 WG

Preparation Date	15/07/2011
Issue Date	18/07/2011
MSDS No	FORM_MSDS_R&D_028_00
Rev. Date/No	

Sayfa No: 1/9

This MSDS is written according to MSDS PREPARATION AND DISTRIBUTION REGULATION FOR HAZARDOUS SUBSTANCE AND PREPARATIONS (R.G. 26/12/2008-27092).

1. MATERIAL / COMPANY

1.1 Material

Product Name : **EFFICURE 75 WG**
Ingredient : MANCOZEB % 75
Formulation : WG (WATER DISPERSIBLE GRANUL)

Cas No : 8018-01-7
EC No : 006-076-00-1
FRAC : M3, M multi-site: alkylenebis(dithiocarbamate)

1.2 Use :

Fungicide

1.3 Company:

Manufacturer and License Holder:

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

1.4 Emergency Call:

Call +90 0232 864 13 33 in case of emergency.

MATERIAL SAFETY DATA SHEET

MATERIAL

EFFICURE 75 WG

Preparation Date	15/07/2011
Issue Date	18/07/2011
MSDS No	FORM_MSDS_R&D_028_00
Rev. Date/No	

Sayfa No: 2/9

This MSDS is written according to MSDS PREPARATION AND DISTRIBUTION REGULATION FOR HAZARDOUS SUBSTANCE AND PREPARATIONS (R.G. 26/12/2008-27092).

2. COMPOSITION / INGREDIENT

Material	%	CAS No	EINECS/ELINCS	Danger	R ¹	Class
Mancozeb	75	8018-01-7	006-076-00-1	Repr. Cat. 3, Xi, N	R37, R43, R63, R50	Xn; R37, R43, Repr. Cat. 3; R63, N; R50
Others*	-					

- ¹ R explanations given in section 16
- * Out of classification since it does not contain dangerous materials.

3. DANGER PHRASES:



XN: HARMFUL



N: DANGEROUS FOR ENVIRONMENT

- R37** : Irritating to respiratory system.
R43 : May cause sensitisation by skin contact.
R63 : Possible risk of harm to the unborn child. (Repr. Cat. 3)
R50 : Very toxic to aquatic organisms.

Safety data sheets have been prepared on the basis of regulations (Official Gazette dated 12.26.2008 and numbered 27 092) for dangerous substances and preparations on the production and dissemination.

MATERIAL SAFETY DATA SHEET

MATERIAL

EFFICURE 75 WG

Preparation Date	15/07/2011
Issue Date	18/07/2011
MSDS No	FORM_MSDS_R&D_028_00
Rev. Date/No	

Sayfa No: 3/9

This MSDS is written according to MSDS PREPARATION AND DISTRIBUTION REGULATION FOR HAZARDOUS SUBSTANCE AND PREPARATIONS (R.G. 26/12/2008-27092).

4. FIRST AID MEASURES:

General Information: The danger zone is emptied. In case there is fainting during Storage and Transportation, the patient is tightly laid down on side. Contaminated clothes are immediately taken off.

Skin contact: Wash off with soap and water.

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

Ingestion: Call a physician immediately.

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

5. FIRE-FIGHTING MEASURES

Aid, in the required Personal Protective Equipment: Explosion and fire do not breathe fumes. Use self contained breathing apparatus for fire fighting if.

Hazards: In case of fire formation of dangerous gases is taken into account.

Fire extinguishers: Foam, carbon dioxide, extinguishing powder.

Oto Flaming Temperature: 205⁰C (401⁰F)

Other Information: Remove the product areas of fire, cool containers with water. If possible, use fire-fighting water with sand or soil then.

6. ACCIDENTAL RELEASE MEASURES:

General Information: listed in Section 8, use personal protection devices.

Personal information: Avoid contact with spilled product or contaminated areas. When dealing with spilled product, do not eat, drink or smoke.

The cleaning process: spilled material is swept away with suitable vacuum cleaner or dust binding material. Material is kept in hard plastic containers in a secure way to be destroyed. Instructions are followed to clean contaminated materials and areas.

MATERIAL SAFETY DATA SHEET

MATERIAL

EFFICURE 75 WG

Preparation Date	15/07/2011
Issue Date	18/07/2011
MSDS No	FORM_MSDS_R&D_028_00
Rev. Date/No	

Sayfa No: 4/9

This MSDS is written according to MSDS PREPARATION AND DISTRIBUTION REGULATION FOR HAZARDOUS SUBSTANCE AND PREPARATIONS (R.G. 26/12/2008-27092).

Additional precautions: Refer to Section 7 for safe use. See Section 8 for personal protective equipment. See Section 13 for disposal.

7. HANDLING AND STORAGE

Handling: Keep away from acids. Use personal protective equipment specified in Section 8. When using do not eat or drink anything. Avoid oral contact, contact with skin and eyes. Do not breathe. Wash thoroughly after handling. During the use of closed packaging, no other security measures other than what is given in the instructions is needed. Use only the rooms with appropriate exhaust ventilation.

Storage: Store in original container in a cool, dry and well-ventilated place. Keep away from food, drink and animal feedstuffs. Protect from direct sunlight. Put the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures: Proper ventilation of general or regional limits permissible under the enabling environment and hold the concentration of substance.

Personal Protective Equipment:

Eyes: Use safety glasses according to EN 166.

Skin: Use protective clothing and suitable gloves. If possible, use 2 layers of clothing. CE marked Nitrile Rubber gloves (min 0.40 mm thick) use. Wash contaminated gloves. Dispose gloves that have not been cleaned inside and out.

Inhalation: EN 149:2001 use appropriate breathing apparatus. Only short-term jobs apparatus respiratory protection, risk reduction steps, for example, local ventilation should be used. The use of respiratory protection apparatus, prepared by manufacturers to use and warning instructions must be followed.

Hygiene measures: When using do not eat, drink or smoke. Before eating, drinking smoking, and going to the toilet, wash your hands every time.

MATERIAL SAFETY DATA SHEET

MATERIAL

EFFICURE 75 WG

Preparation Date	15/07/2011
Issue Date	18/07/2011
MSDS No	FORM_MSDS_R&D_028_00
Rev. Date/No	

Sayfa No: 5/9

This MSDS is written according to MSDS PREPARATION AND DISTRIBUTION REGULATION FOR HAZARDOUS SUBSTANCE AND PREPARATIONS (R.G. 26/12/2008-27092).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid, granul

Color: yellow

Odor: Slight characteristic

pH: 7-9 1% (20°C)

Solubility in water: Disperse

10. STABILITY AND REACTIVITY

Conditions to avoid: Extremes of temperature and direct sunlight.

Dangerous Polimeration Product: Not occur.

11. TOXICOLOGICAL INFORMATION

Mancozeb Technical Article:

Oral Acute oral LD₅₀ for rats >5000 mg/kg. **Skin and eye** Acute percutaneous LD₅₀ for rats >10 000, rabbits >5000 mg/kg. No irritation to skin (rabbits); eye irritation Category III (EPA classification). No dermal sensitisation in Buehler test; may cause dermal sensitisation in guinea pig maximisation test. **Inhalation** LC₅₀ (4 h) for rats >5.14 mg/l. **NOEL** Chronic NOAEL (2 y) for rats 4.8 mg/kg b.w. daily. Ethylenethiourea chronic NOAEL (2 y) for rats 0.37 mg/kg b.w. daily. Below parentally toxic levels, mancozeb was observed to have no effect on reproduction, on neonatal survival, or on growth or development. **ADI/RfD** (JMPR) 0.03 mg/kg b.w. (group ADI with maneb, metiram and zineb); ethylenethiourea 0.004 mg/kg b.w. [1993]; (EC) 0.05 mg/kg b.w. [2005]; (EPA) aRfD 1.3, cRfD 0.05 mg/kg b.w. [2005]; ethylenethiourea aRfD 0.005, cRfD 0.0002 mg/kg b.w. [1992]. **Other** At very high, maternally toxic levels, mancozeb has caused birth defects in test animals; ethylenethiourea, a trace contaminant and breakdown product of mancozeb, has caused thyroid effects, tumours and birth defects in laboratory animals. **Toxicity Class** WHO (a.i.) U; EPA (formulation) IV **EC classification** R63| R43| N; R50 concn. dep.

MATERIAL SAFETY DATA SHEET

MATERIAL

EFFICURE 75 WG

Preparation Date	15/07/2011
Issue Date	18/07/2011
MSDS No	FORM_MSDS_R&D_028_00
Rev. Date/No	

Sayfa No: 6/9

This MSDS is written according to MSDS PREPARATION AND DISTRIBUTION REGULATION FOR HAZARDOUS SUBSTANCE AND PREPARATIONS (R.G. 26/12/2008-27092).

12. ECOLOGICAL INFORMATION

Mancozeb Technical Article:

Birds Acute oral LD₅₀ (10 d) for mallard ducks >5500, Japanese quail 5500, English sparrows (*Passer domesticus*) >1290, European starlings (*Sturnus vulgaris*) >2400 mg/kg. Acute dietary LC₅₀ (8 d) for bobwhite quail and mallard ducks >5200 mg/kg diet. Chronic reproduction NOEL for mallard ducks 125, bobwhite quail 300 mg/kg diet.

Fish LC₅₀ (96 h, flow-through) for rainbow trout 1.0, bluegill sunfish >3.6 mg/l. NOEC (34 d, early life-stage) for fathead minnows 0.022 mg/l; extended growth NOEC (14 d) for rainbow trout 0.66 mg/l. **Daphnia** EC₅₀ (48 h, flow-through) 3.8 mg/l. **Algae** EC₅₀ (120 h, cell density) for *Selenastrum capricornutum* 0.044 mg/l.

Other aquatic spp. EC₅₀ (24 h) for rotifers (*Brachionus calyciflorus*) 0.11 mg/l; LC₅₀ (48 h) for snails (*Lymnae stagnalis*) >113, amphipods (*Gammarus* sp.) 3.0, isopods (*Asellus* sp.) 4.4 mg/l. Outdoor mesocosm (11 w, macroinvertebrates and phytoplankton communities), after 8 applications, EAC 0.032 mg/l. **Bees** LD₅₀ (oral) >209 µg/bee; (contact) >400 µg/bee.

13. DISPOSAL INFORMATION

Product: Waste must not be disposed with household waste. The remaining amount of waste should not be poured into waste water canal, should be disposed of in accordance with Hazardous Waste Control Regulation.

Contaminated packaging: Empty containers should not be used for other products. Completely emptied and shaken containers should be properly disposed. Contaminated packaging is disposed of as hazardous waste.

MATERIAL SAFETY DATA SHEET

MATERIAL

EFFICURE 75 WG

Preparation Date	15/07/2011
Issue Date	18/07/2011
MSDS No	FORM_MSDS_R&D_028_00
Rev. Date/No	

Sayfa No: 7/9

This MSDS is written according to MSDS PREPARATION AND DISTRIBUTION REGULATION FOR HAZARDOUS SUBSTANCE AND PREPARATIONS (R.G. 26/12/2008-27092).

14. TRANSPORT INFORMATION

ADR / RID / ADNR

UN-No. : 3077

Danger sign: 9

Packaging group: III

Description of the goods UN 3077 Environmentally Hazardous Substance, Solid, NOS (waste-free) (Mancozeb mix)

IMDG

UN-No. : 3077

Class: 9

Packaging group: III

Marine Pollutant: Yes

Description of the goods UN 3077 Environmentally Hazardous Substance, Solid, NOS (waste-free) (Mancozeb mix)

IATA

UN-No. : 3077

Class: 9

Packaging group: III

Description of the goods UN 3077 Environmentally Hazardous Substance, Solid, NOS (waste-free) (Mancozeb mix)

MATERIAL SAFETY DATA SHEET	
MATERIAL	EFFICURE 75 WG

Preparation Date	15/07/2011
Issue Date	18/07/2011
MSDS No	FORM_MSDS_R&D_028_00
Rev. Date/No	

Sayfa No: 8/9

This MSDS is written according to MSDS PREPARATION AND DISTRIBUTION REGULATION FOR HAZARDOUS SUBSTANCE AND PREPARATIONS (R.G. 26/12/2008-27092).

15. REGULATORY INFORMATION

Safety data sheets for dangerous substances and preparations on the production and dissemination of regulations (Official Gazette dated 12.26.2008 and numbered as 27 092) is based on.

Hazard Sign and Symbol:



XN: HARMFUL



N: DANGEROUS FOR ENVIRONMENT

Hazardous Substances mentioned on the label: Contains Manzoceb.

Risk Phrases:

Physicochemical: -

Health:

R37 : Irritating to respiratory system.

R43 : May cause sensitisation by skin contact.

R63 : Possible risk of harm to the unborn child. (Repr. Cat. 3)

Environment:

R50 : Very toxic to aquatic organisms

Safety Phrases:

S 1/2 : 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.

S20 : When using do not eat or drink.

S24 : Avoid contact with skin.

S29 : Do not empty into drains.

S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

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.

S64 : If swallowed, rinse mouth with water (only if the person is conscious).

MATERIAL SAFETY DATA SHEET

MATERIAL

EFFICURE 75 WG

Preparation Date	15/07/2011
Issue Date	18/07/2011
MSDS No	FORM_MSDS_R&D_028_00
Rev. Date/No	

Sayfa No: 9/9

This MSDS is written according to MSDS PREPARATION AND DISTRIBUTION REGULATION FOR HAZARDOUS SUBSTANCE AND PREPARATIONS (R.G. 26/12/2008-27092).

16. OTHER INFORMATION

N: Dangerous for the environment

Xn: Harmful

Xi: Irritant

Risk Phrases mentioned in Section 2:

R37 : Irritating to respiratory system.

R43 : May cause sensitisation by skin contact.

R63 : Possible risk of harm to the unborn child. (Repr. Cat. 3)

R50 : Very toxic to aquatic organisms

Date of Preparation : 15/07/2011

Release Date : 18/07/2011

MSDS No : FORM_MSDS_R&D_028_00

Date of Renewal/No :-

Prepared By : Seçil CANAYAKIN

This safety data sheet is in addition to the manufacturer's instructions, but does not replace instructions. The information in this form contains the criteria for regulation needed during the preparation of Material Safety Data Sheet. Required information "concerning dangerous substances and preparations regulation on the production and dissemination of safety data sheets (R.G dated 26/12/2008, and numbered 27 092)" is based on. Relevant institutions and individuals are requested to follow this regulation.