

# MATERIAL SAFETY DATA SHEET

**MATERIAL**

**GENOZEB 80 WG**

Preparation Date	30/11/2015
Issue Date	30/11/2015
MSDS No	FORM_MSDS_R&D_273_00
Rev. Date/No	

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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** : **GENOZEB 80 WP**

**Ingredient** : MANCOZEB % 80

**Formulation** : WP (Wettable Powder)

**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.

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## 2. COMPOSITION / INGREDIENT

Material	%	CAS No	EINECS/ELINCS	Danger	R <sup>1</sup>	Class
Mancozeb	80	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*	-					

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

## 3. DANGER PHRASES:



**XN: HARMFUL**(Toxic to the reproductive system cat.3)



**N: DANGEROUS FOR ENVIRONMENT**

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

## 4. FIRST AID MEASURES:

**SYMPTOMS OF POISONING:** headache, nausea, fatigue,

**FIRST AID MEASURES:** In case contact the skin, take off dirty clothes and wash exposed skin with plenty of soapy water. In case of swallowed, do not regurgitate, Rinse him mouth with clean water, call a doctor. Shouldn't be given increase the absorption of substances such as oil, milk or alcohol. If the patient is blackout, have gone him out for fresh air, call a doctor. In case contact of eye, wash with plenty of water for 10-15 minutes, see a doctor.

**ANTIDOTE AND REQUIRED INFORMATION:** No specific antidote is known.

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## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing matters:** Water spray, foam, dry extinguishing media, carbon dioxide

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

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

**Flash Point Limits:** 0.29 g/L (% volume in the air)

**Auto Ignition Temperature:** 205°C (401°F)

**Additional information:** Do not breathe fumes of explosion and fire. In case of exposed to fire, keep containers cool by spraying with water. Collect contaminated extinguishing water separately from the product, do not allow to reach sewage or wastewater systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

## 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.

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

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## 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 except those 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 smokings, and going to the toilet, wash your hands every time.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Solid, powder

**Color:** yellow

**Odor:** Sulfur Odor

**pH:** 5,5-9,5 10% (20<sup>0</sup>C)

**Bulk density:** 0, 20 – 0, 50 kg/m<sup>3</sup>

## 10. STABILITY AND REACTIVITY

**Conditions to avoid:** Extremes of temperature and direct sunlight.

**Dangerous Polymerization Product:** Not occur.

## 11. TOXICOLOGICAL INFORMATION

**Mancozeb Technical Article:**

**Oral** Acute oral LD<sub>50</sub> for rats >5000 mg/kg.

**Skin and eye** Acute percutaneous LD<sub>50</sub> 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** LC<sub>50</sub> (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].

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**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.

## 12. ECOLOGICAL INFORMATION

### Mancozeb Technical Article:

**Birds** Acute oral LD<sub>50</sub> (10 d) for mallard ducks >5500, Japanese quail 5500, English sparrows (*Passer domesticus*) >1290, European starlings (*Sturnus vulgaris*) >2400 mg/kg. Acute dietary LC<sub>50</sub> (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** LC<sub>50</sub> (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** EC<sub>50</sub> (48 h, flow-through) 3.8 mg/l.

**Algae** EC<sub>50</sub> (120 h, cell density) for *Selenastrum capricornutum* 0.044 mg/l.

**Other aquatic spp.** EC<sub>50</sub> (24 h) for rotifers (*Brachionus calyciflorus*) 0.11 mg/l; LC<sub>50</sub> (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** LD<sub>50</sub> (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.

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**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.

## 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)

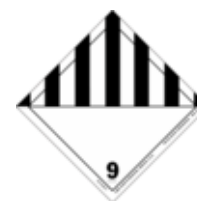
**IATA**

**UN-No. :** 3077

**Class:** 9

**Packaging group:** III

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



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## 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**(Toxic to the reproductive system cat.3)



**N: DANGEROUS FOR ENVIRONMENT**

**Hazardous Substances mentioned on the label:** Contains Mancozeb.

### Risk Phrases:

**Physicochemical:** -

### Health:

**R37** : Irritating to respiratory system.

**R43** : May cause sensitization 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).



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## 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 sensitization 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** : Remzican KARAN

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.