

## MATERIAL SAFETY DATA SHEET

### VECTOR 50 WG

**1. Manufacturer** : AGRI-SCIENSES TARIM ILACLARI SAN. VE TIC. LTD. STI. Bekir Saydam  
Caddesi Pancar No:31 Torbalı / IZMIR

#### **2. Chemical Product Identification:**

**Product Name** : VECTOR 50 WG / FUNGICIDE  
**Formulation** : Water Dispersible Granule (WG)

#### **Hazardous Components**

##### **Cyprodinil 50% w/w**

**Cas No** : 121552-61-2  
**Symbols** : Xi, N  
**R phrases** : R43, R50/53

##### **Naphthalenesulfonic acid, dibutyl-, sodium salt 1-5 % w/w**

**Cas No** : 25417-20-3  
**EC No** : 246-960-6  
**Symbols** : Xn  
**R phrases** : R20/22, R36/38

##### **Silica 10-20% w/w**

**Cas No** : 91053-39-3  
**EC No** : 293-303-4

For the full text of the R phrases mentioned in this section, see section 16.

#### **3. Hazard Identification:**

Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment. May form flammable dust-air mixture.

**Date of Issue** 20/08/2010

#### 4. First Aid Measures:

<b>General Advice</b>	: Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or physician, or going for treatment.
<b>Inhalation</b>	: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or poison control center immediately.
<b>Skin Contact</b>	: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
<b>Eye Contact</b>	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
<b>Ingestion</b>	: If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting.
<b>Medical Advice</b>	: There is no specific antidote available. Treat symptomatically.

#### 5. Fire/Fighting Measures:

**Suitable extinguishing media** : Extinguishing media – small fires. Use water spray, alcohol – resistant foam, dry chemical or carbon dioxide.

Extinguishing media – large fires. Alcohol – resistant foam water spray.

**Extinguishing media which must not be used for safety reasons:** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards during fire fighting:** As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion. (see section 10)

Exposure to decomposition products may be hazard to health.

**Special protective equipment for fire – fighters:** In the event of fire, wear self – contained breathing apparatus.

**Further Information:** Do not allow run – off from fire fighting to enter drains or water courses.

Cool closed containers exposed to fire with water spray.

## 6. Accidental Release Measures :

**Personal precautions** : Refer to protective measures listed in sections 7 and 8. Avoid dust formation.

**Environmental precautions** : Do not flush into surface water or sanitary sewer system.

**Methods for cleaning up** : Pick up and arrange disposal without creating dust. Do not create a powder cloud by using a brush or compressed air. Clean contaminated surface thoroughly.

**Additional Advice** : If the product contaminates rivers and lakes or drains inform respective authorities.

## 7. Handling And Storage:

### HANDLING

**Advice on safe handling** : This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. For personnel protection see section 8.

### STORAGE

**Requirements for storage areas and containers:** Keep containers tightly closed in a dry, cool and well – ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feed.

**Other Data:** Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

## 8. Exposure Controls/Personal Protection

### Engineering Measures:

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne dust is generated, use local exhaust ventilation controls.

Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.

Where necessary, seek additional occupational hygiene advice.

**Date of Issue** 20/08/2010

## PERSONAL PROTECTIVE EQUIPMENT

**Protective measures** : The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.

**Respiratory protection** : No personal respiratory protective equipment normally required. A particulate filter respirator may be necessary until effective technical measures are installed.

**Hand protection** : Chemical resistant gloves are not usually required. Select gloves based on the physical job requirement.

**Eye protection** : Eye protection is not usually required. Follow any site specific eye protection policies. Eye / face protection should be certified to EN 166.

**Skin and body protection** : No special protective equipment required. Select skin and body protection based on the physical job requirements.

## 9. Physical and Chemical Properties:

<b>Form</b>	: Granules
<b>Color</b>	: Tan to brownish
<b>Odor</b>	: Weak
<b>pH</b>	: 7 – 11 at 10% w/v
<b>Melting point/range</b>	: > 78 °C
<b>Flammability (solid/gas)</b>	: Not highly flammable.
<b>Dust explosion class</b>	: Class 1
<b>Min. ignition energy</b>	: < 1 J
<b>Oxidizing properties</b>	: Not oxidizing
<b>Explosive properties</b>	: Not explosive
<b>Bulk density</b>	: 0,48 g/cm <sup>3</sup>
<b>Water solubility</b>	: Miscible

## 10. Stability and Reactivity:

**Hazardous decomposition products** : Combustion or thermal decomposition will evolve toxic and irritant vapors.

**Hazardous reactions** : None known. Hazardous polymerization does not occur. Stable under normal conditions.

Date of Issue 20/08/2010

## 11. Toxicological Information

- Acute oral toxicity** : LD<sub>50</sub> Rat > 2,000 mg/kg Based on test results obtained with similar product.
- Acute inhalation toxicity** : LC<sub>50</sub> Rat > 2,300 mg/m<sup>3</sup> 4 hours Based on test results obtained with similar product.
- Acute dermal toxicity** : LD<sub>50</sub> Rat > 2,000 Based on test results obtained with similar product.
- Skin Irritation** : Rabbit: non irritant. Based on test results obtained with similar product.
- Eye Irritation** : Rabbit: non irritant. Based on test results obtained with similar product.
- Sensitization** : Guinea Pig: not sensitizing. Based on test results obtained with similar product.
- Long term toxicity** : Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

## 12. Ecological And Ecotoxicological Information:

### Elimination Information (persistence and degradability):

- Bioaccumulation** : Cyprodinil does bioaccumulate.
- Stability in water** : Cyprodinil is not persistent in water.
- Stability in soil** : Cyprodinil is not persistent in soil.
- Mobility** : Cyprodinil has low to slight mobility in soil.

### Ecotoxicity Effects:

- Toxicity to fish:** LC<sub>50</sub> Oncorhynchus mykiss (Rainbow trout), 6, 2 mg/l, 96 h
- Toxicity to aquatic invertebrates:** EC<sub>50</sub> Daphnia magna (water flea), 0, 14 mg/l, 48 h
- Toxicity to algae:** ERC<sub>50</sub> Selenastrum capricornutum (green algae), 4, 1 mg/l, 72 h

## 13. Disposal Considerations:

- Product** : Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is not practicable, dispose of in compliance with local regulations.

Date of Issue 20/08/2010

**Contaminated packaging** : Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Did not re-use empty containers.

#### 14. Transport Information :

##### Land Transport:

###### ADRI RID

**UN-No** : 3077

**Class** : 9

**Danger Label Number** : 9

**Packaging Group** : III

**Proper Shipping Name** : Environmentally Hazardous Substance, Solid, N.O.S.  
(CYPRODINIL)

##### Sea Transport

###### IMDG

**UN-No** : 3077

**Class** : 9

**Danger Label Number** : 9

**Packaging Group** : III

**Proper Shipping Name** : Environmentally Hazardous Substance, Solid, N.O.S.  
(CYPRODINIL)

**Marine Pollutant** : Marine pollutant

##### Air Transport

###### IATA – DGR

**UN-No** : 3077

**Class** : 9

**Danger Label Number** : 9

**Packaging Group** : III

**Proper Shipping Name** : Environmentally Hazardous Substance, Solid, N.O.S.  
(CYPRODINIL)

#### 15. Regulatory Information :

##### Labeling according to EC Directives

**Symbol(s)** : N Dangerous for the environment.

Date of Issue 20/08/2010

**R – Phrase(s) :**

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S – Phrases(s) :**

S 2 Keep out of the reach of children.

S 13 Keep away from food, drink and animal feedingstuffs.

S 20/21 When using do not eat, drink or smoke.

S 35 This material and its container must be disposed of in a safe way.

S 57 Use appropriate container to avoid environmental contamination.

**Exceptional labeling of special preparations:** To avoid risks to man and the environment, comply with the instructions for use. Contains cyprodinil. May produce an allergic reaction.

**Note :** The preparation is classified as dangerous good in accordance with directive 1999-45-EC.

**16. Other Information :**

**Further Information:**

Text of R phrases mentioned in section 2:

R 20/22 Harmful by inhalation and if swallowed.

R 36/38 Irritating to eyes and skin.

R43 May cause sensitization by skin contact.

R 50/53 Very toxic to aquatic organisms may cause long – term adverse effects in the aquatic environment.

*This information only concerns the above mentioned product and does not need to be valid if used with other product ( s ) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user’s own responsibility to make sure that the information is appropriate and complete for the special use of this product.*

**Date of Issue 20/08/2010**