

## PRODUCT SAFETY DATA SHEET

**SUBSTANCE / PREPARATION NAME**

**BENVOL**

Date of preparation	14/07/2011
Release Date	18/07/2011
MSDS No	FORM_MSDS_R&D_026_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** : **BENVOL**  
**Content** : KRESOXIM METHYL 50%  
**Formulation Type** : Water dispersible granules (WG)  
**Cas No** : 143390-89-0  
**EC No** : 417-880-0  
**FRAC** : 11, C3 QoI; strobilurin type: oximinoacetate

#### 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 <sup>1</sup>	Classification
Kresoxim Methyl	50	143390-89- 0	417-880-0	Carc. Cat. 3, N	R40, R50, R53	Xn; Carc. Cat 3 R40, N; R50, R53
Others <sup>2</sup>	-	-	-	-	-	-

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

### 3. IDENTIFICATION OF HAZARDS:



**Xn: Harmful**



**N: dangerous for the environment**

R40 : Limited evidence of a carcinogenic effect.

R50 : Very toxic to aquatic organisms.

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

### 4. FIRST AID PRECAUTIONS:

**Symptoms of poisoning:** headache, nausea, fatigue

**First-aid measures:** If medication has been inhaled in powder form, Remove patient to fresh air. Call a doctor and take it along with the drug label. drug if swallowed drug, patients induced vomiting, infected eyes or skin should be washed with soap and water.

**Antidote and Required Information:** There is no a specific antidote, are treated symptomatically.

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### 5. FIRE-FIGHTING MEASURES

**Required Personal Protective Equipment in Aid:** Unaffected by the environment, breathing with independent air supply.

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

**Fire Extinguishers:** Foam, carbon dioxide, extinguishing powder.

**Further information:** If even the fire is very small and easily extinguished, Call the fire department. Make a light spray to keep containers cool unopened containers. If the risk does not exist, without having to remove intact containers exposed to fire. Cover with sand or soil water the fire if necessary. Avoid contamination to Public open spaces, surface waters and the environment.

### 6. ACCIDENTAL RELEASE PRECAUTIONS:

**General Information:** Use personal protection devices, specified in section 8.

**Outpouring / Leaking:** Sweep up spilled material in suitable containers, collect and send destruction. Collected product containers tightly closed and complete. The collected material should be handled according to Section 13.

### 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.

**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.

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### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

**Engineering Precautions:** Keep the substance concentration below the allowable limits by providing the appropriate general or regional ventilation.

**Kişisel Korunma Donanımları:**

**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.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** : Sold, granule

**Color** : Dark Brown

**Odour** : Light Sulfur

**Bulk Densite** : 0,54 – 0,59 kg/m<sup>3</sup>

**pH** : 7-9 (%1 solution)

**Solubility in water** : Dispers

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### 10. STABILITY AND REACTION

**Stability** : Stable under normal use and storage conditions.  
**Hazardous Polymerization** : Will not occur.  
**Conditions to Avoid** : Heat and light  
**Hazardous degradation products** : High temperatures and toxic gases can be detached.  
**Hazardous Decomposition Products:** Combustion or thermal decomposition may release toxic and irritating fumes.

### 11. TOXICOLOGICAL INFORMATION

**Kresoxim Methyl Technical Substance:**

Acut Oral LD<sub>50</sub> rat >5000 mg/kg.

**Skin and Eyes** Acute percutan LD<sub>50</sub> rat >2000 mg/kg. it is not irritating for skin. (Rabbit)

**Respiration** LC<sub>50</sub> (4 h) rat >5,6 mg/l.

NOEL (3 ay) rat 2000 ppm (146 mg/kg daily), rat 500 ppm (43 mg/kg daily); (2 years) rat 36, rat 48 mg/kg b.w. daily.

ADI/RfD (EC) 0.4 mg/kg b.w. [1999]; (JMPR) 0.4 mg/kg b.w. [1998]; (EPA) RfD 0.36 mg/kg [1998]. Others: the Ames test is negative, is not teratogenic.

### 12. ECOLOGICAL INFORMATION

**Kresoxim Methyl Technical Substance:**

Although the main molecular toxicity on aquatic life, exposure tests and ecological studies has been shown permanently harm the aquatic environment when used kresoxim methyl as recommended.

Birds Acute oral LD<sub>50</sub> quail (14 days) > 2150 mg / kg. LC<sub>50</sub> (8 day) Bobwhite quail and mallard duck > 5000 ppm.

Fish LC<sub>50</sub> (96 h) *rainbow trout* 190 ppb, *bluegill sunfish* 0.499 mg/l .

Daphnia EC<sub>50</sub> (48 hour) 0,186 mg/l.

Alg: EC<sub>50</sub> (0-72 hour) *Ankistrodesmus bibraianus* 63 µg/l

Bee: LD<sub>50</sub> (48 hour) (oral) 14 14 µg/bee; (contact) > 20 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 ) (KRESOXIM METHYL MIXTURE)

#### 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 ) (KRESOXIM METHYL MIXTURE)

#### IATA

**UN-No.** : 3077

**Class** : 9

**Packaging Group** : III

**Property of the product** : UN 3077 Environmental hazardous substance, sold N.O.S. (waste free ) (KRESOXIM METHYL MIXTURE)

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### 15. REGULATORY INFORMATION

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).

#### Hazard Signal and Symbol:



**Xn: Harmful**

**N: Dangerous for the environment**

#### Hazardous Substances Found On The Label:

Containing Kresoxim Methyl

#### Risk Phrases

#### Health:

**R40** : Limited evidence of a carcinogenic effect.

#### Environment:

**R50** : Very toxic for aquatic organisms.

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

#### Safety Phrases:

**S1/2** : Keep away from children and store under lock.

**S9** : Keep container in well-ventilated place.

**S13** : Keep away from foods, drinks and animal feedstuffs

**S20** : Do not eat or drink during the usage.

**S29** : Do not pour into sewer system.

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

**S46** : If swallowed, seek medical advice immediately, show the container or label..

**S56** : Dispose the material at hazardous or special waste collection point.

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### Important Labeling :

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

### 16. OTHER INFORMATIONS

**Xn:** Harmful

**N:** Dangerous for the environment

#### Risk phrases mentioned in Section 2::

**R40** : Limited evidence of a carcinogenic effect.

**R50** : Very toxic for aquatic organisms.

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

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.

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