

MATERIAL SAFETY DATA SHEET

SUBSTANCE / PREPARATION NAME

SIGMACORE

Date of preparation	12/07/2011
Release Date	18/07/2011
MSDS No	FORM_MSDS_R&D_024_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 : SIGMACORE
Content : BOSCALID 50 %
Formulation Type : Water dispersible granules (WG)
Cas No : 188425-85-6
FRAC : 7, C2 SDHI: pyridinecarboxamide

1.2 Usage of Substance/Preparation:

Fungicide

1.3 Firm 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	Hazard	R ¹	Classification	Substance
Boscalid	50	188425-85-6	-	N	R51, R53	N; R51, R53
Diğerleri ²	-	-	-	-	-	-

- **Descriptions about ¹R are given in chapter 16**
- ² It's out of classification in that does not contain dangerous substances.

3. IDENTIFICATION OF HAZARDS:



N: Dangerous for the environment

R51: : Very toxic to aquatic organisms.

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

4. FIRST AID PRECAUTIONS:

Symptoms of poisoning: headache, nausea, fatigue, eye and skin irritation.

First Aid Measures: In case of poisoning, take the following measures.

Keep soap and water at the application site. After the job is finished, Wash immediately with water, place in the body that come into contact with drugs before eating, drinking and smoking, take off dirty clothes and wash exposed skin with plenty of soapy water. In case contact of eye, wash with plenty of water for 15 minute, call a doctor, show the label or the package. In case of contact skin, get off contaminated clothes and wash the skin with plenty of water. Show packaging and label of pesticide to the doctor. Remove the patient from the medicated field.

Antidote and Required Information: There is no special antidote,

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5. FIRE-FIGHTING MEASURES

Required Personal Protective Equipment in Aid: 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.

6. ACCIDENTAL RELEASE PRECAUTIONS:

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

Spill / Leak :Sweep up spilled material in appropriate containers to collect and send destruction. Fill collected product in firmly closed containers.The collected material should be handled in accordance with 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.It does not need any other security precautions other than instructions on it. Use only the rooms with appropriate exhaust ventilation.

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.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Sold, granule

Color : Grey-Brown

Bulk Density : $0,55 \pm 0,05$ kg/m³

pH : 5-7 (%1 lik solusyon)

Solubility in water : Disperse

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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
- Materials to avoid** : None known.
- Hazardous dissolved products** : High temperatures and toxic gases dissolved
- Hazardous decomposition products**: Combustion or thermal decomposition will evolve toxic and irritant vapors may be formed.

11. TOXICOLOGICAL INFORMATION

Boscalid Technical Substance:

- Acute Oral LD50 rat > 5000 mg / kg.
- Skin and eye Acute dermal LD50 rat > 2000 mg / kg. Rabbits are not eye and skin irritant.
- Inhalation LC50 (4 h) rat > 6.7 mg / l.
- NOEL rat 5 mg / kg bw, chronic NOAEL 8.21 mg / kg bw (EPA).
- ADI / RfD (JMPR) 0.04 mg / kg b.w. [2006]; (EC) 0.04 mg / kg b.w. [2008]; (EPA) cRfD 0.218 mg / kg b.w. [2003]; (FSC) 0.044 mg / kg b.w. [2006].
- Others: Not mutagenic (Ames, mouse), is not teratogenic (rat, rabbit), is not carcinogenic (dog, mouse, rat), there is no adverse effect on reproduction. (rat)

12. ECOLOGICAL INFORMATION

Boscalid Technical Substance:

- Birds Acute oral LD50 quail (Bobwhite quail) > 2000 mg / kg bw
- Fish LC50 (96 h), trout (rainbow trout), 2.7 mg / l.
- Daphnia EC50 (48 hours) 5.33 mg / l.
- Algae: ErC50 (96 hours) Pseudokirchneriella subcapitata 3.75 mg / l.
- Bee: NOEC oral 166 mg / bee, contact 200 mg / 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

Class : 9

Packaging Group : III

Property of the product : UN 3077 ENVIRONMENTAL HAZARDOUS SUBSTANCE, SOLID N.O.S. (WASTE FREE) (CONTAINING BOSCALID MIXTURE)

IMDG

UN-No. : 3077

Class : 9

Packaging Group : III

Sea Pollutant : Yes

Property of the product : UN 3077 ENVIRONMENTAL HAZARDOUS SUBSTANCE, SOLID N.O.S. (WASTE FREE) (CONTAINING BOSCALID MIXTURE)

IATA

UN-No. : 3077

Class : 9

Packaging Group : III

Property of the product : UN 3077 ENVIRONMENTAL HAZARDOUS SUBSTANCE, SOLID N.O.S. (WASTE FREE) (CONTAINING BOSCALID 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:



N: Dangerous for the environment

Hazardous Substances Found On The Label:

Containing Boscalid.

Risk Phrases

Health:

Environment:

R51 : Very toxic for aquatic organisms.

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

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 feed stuffs

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.

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

Important Labeling :

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

Toxicity class WHO (a.i.) U

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16. OTHER INFORMATIONS

N: DANGEROUS FOR THE ENVIRONMENT

Risk phrases mentioned in Section 2:

R51: Very toxic for aquatic organisms

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

This security information form is additional to manufacturer firm's instructions, however does not replace within structions. This form contains regulation criteria 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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