

PRODUCT SAFETY DATA SHEET

SUBSTANCE / PREPARATION NAME

BELLUM

Date of preparation	20/06/2011
Release Date	22/06/2011
MSDS No	FORM_MSDS_R&D_017_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 : **BELLUM**
Content : Pyraclostrobin 6,7% + Boscalid 26,7%
Formulation Type : WG (Water Dispersible Granules)
PYRACLOSTROBIN 6,7%
Cas No : 175013-18-0
EC No : -
FRAC : 11, C3 QoI; strobilurin type: methoxycarbamate
BOSCALID 26,7%
Cas No : 188425-85-6
EC No : -
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 İLAÇÜR. SAN. TİC. LTD. ŞTİ.

Address : Bekir Saydam Caddesi No: 31 Pancar Torbalı / İZMİR

Telephone : +90 0232 864 13 33

Fax : +900232 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 ¹	Classification
Pyraclostrobin	6,7	175013-18-0	-	T; Xi; N	R23, R38, R50, R53	Xn; R23, N; R50, R53
Boscalid	26,7	188425-85-6	-	-	-	-
Others ²	66,6	-	-	-	-	-

- Descriptions about ¹R 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

R23 Toxic by inhalation,

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: 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.

TREATMENT: In case of poisoning, symptomatic treatment.

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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 such as Carbon monoxide, hydrogen chloride, nitrogen oxides, organochlorine compounds.

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

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 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.

Personal precautions: Use personal protective clothing. Avoid contact with the skin, eyes and clothes. Avoid formation of dust.

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Environmental precautions: Do not discharge to subsoil / soil. Do not discharge to Drains / surface waters / groundwater.

Cleaning methods: For small pieces: Keep with dust binding material and dispose. For large pieces: Clean with mechanical methods. Avoid raising dust. Cleaning operations should be done while wearing breathing apparatus. Dispose of the material in accordance with regulations. Collect waste in suitable containers, labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations and clean.

7. HANDLING AND STORAGE

Handling : Use personal protection devices, specified in section 8.

How to use: No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas.

Protection Against Fire and explosion: Avoid formation of dust. Avoid deposition of dust. Accumulation of fine dust will cause dust explosion hazard in the presence of air.

Storage: Keep away from foods and animal feeds.

Further information on storage conditions: protect from moisture, heat, direct sunlight.

Storage stability: Storage period: 24 months

Protect from temperatures over: 30 ° C

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.

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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 : Granule
Color :Brown
Bulk Density : 0,6 ±0,05 kg/m³
Solubility in water :Disperse

10. STABILITY AND REACTION

Thermal decomposition: as prescribed / indicated decomposition if stored and handled.

Hazardous reactions: No / No hazardous reactions if stored and handled as described.

Hazardous decomposition products: Predicted / hazardous decomposition products if stored and handled as specified.

11. TOXICOLOGICAL INFORMATION

Pyraclostrobin Technical Substance:

Acute Oral LD50 rat > 5000 mg / kg.

Skin and eye: Acute percutaneous LD50 rat > 2000 mg / kg. Rabbits are not irritating to the eyes, the skin may cause irritation.

Inhalation LC50 (4 h) rat 0.69 mg / l.

NOEL (2 y) rat 75 ppm (3 mg / kg b.w. daily)

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Boscalid Technical Substance:

Acute Oral LD50 rat > 5000 mg / kg.

Skin and eye: Acute dermal rat > 2000 mg / kg. Rabbits are not irritating to eyes and skin.

Inhalation LC50 (4 h) rat 6.7 mg / l.

NOEL (2 y) rat 5 mg / kg b.w. daily

12. TOXICOLOGICAL INFORMATION

Pyraclostrobin Technical Substance:

Birds Acute oral LD50 quail (Bobwhite quail) > 2000 mg / kg.

Fish LC50 (96 hours) seal (rainbow trout) 0.006 mg / l.

Daphnia EC50 (48 hours) 0.016 mg / l.

Algae ErC50 (72 hours) *Pseudokirchneriella subcapitata* > 0843 mg / l; EbC50 (72 hours) *Pseudokirchneriella subcapitata* 0152 mg / l.

Bees LD50 (oral) > 73.1 mg / bee; (contact) > 100 mg / bee

Boscalid Technical Substance:

Birds Acute oral LD50 quail (Bobwhite quail) > 2000 mg / kg.

Fish LC50 (96 hours) seal (rainbow trout), 2.7 mg / l.

Daphnia EC50 (48 hours) 5.33 mg / l.

Algae ErC50 (72 hours) *Pseudokirchneriella subcapitata* 3.75 mg / l

Bees LD50 (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

Danger Signal : 9

Packaging Group : III

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

IMDG

UN-No. : 3077

Danger Signal : 9

Packaging Group : III

Sea Pollutant : Yes

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



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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 PYRACLOSTROBIN AND BOSCALID)

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 Pyraclostrobin and Boscalid.

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Risk Phrases

Health:

R23 : Toxic by inhalation,

Environment:

R50 : Very toxic for aquatic organisms.

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

Safety Phrases:

S1/2 :Keep out of reach of children

S13 :Keep away from. Food, drink and animal feedstuffs

S20 :When using do not eat or drink.

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

S38 :In case of insufficient ventilation wear suitable respiratory equipment.

S45 :In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).

S51 :Use only in well-ventilated areas.

S63 :In the poisoning case remove the patient from the sprayed field, If he/she is at closed area, you must immediately send him to fresh air

Important Labeling :

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

16. OTHER INFORMATIONS

T: TOXIC

N: DANGEROUS FOR THE ENVIRONMENT

Xi: IRRITANT

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HAZARDOUS SUBSTANCES (dated 26/12/2008 and 27092 numbered).

Risk phrases mentioned in Section 2:

R23: Toxic by inhalation.

R38: Irritating to skin.

R50: 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 with instructions. 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.