

MATERIAL SAFETY DATA SHEET

NAME OF MATERIAL/PREPARATION

VERDUN

| | |
|---------------------|----------------------|
| Date of Preparation | 15/08/2012 |
| Date of Issue | 15/08/2012 |
| MSDS No | FORM_MSDS_R&D_076_00 |
| Renewal Date/No | |

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PREPARED BASED ON REGULATION ON PREPARATION AND DISTRIBUTION OF SAFETY DATA SHEETS ABOUT HAZARDOUS MATERIALS AND PREPARATIONS (O.G. issue no 27092 dated 26/12/2008).

1. MATERIAL/PREPARATION AND COMPANY/OWNER IDENTIFICATION:

1.1 Material/Preparation Identification:

Product Name : VERDUN
Product Content : FOSETYL - AL %80
Formulation Form : Granule dispersible in water (WG)

FOSETYL - AL

Cas No : 39148-24-8
EC No : 254-320-2
FRAC : 33, U Phosphonate

1.2 Usage of the Material/Preparation:

Fungicide

1.3 Company Identification:

Manufacturing and License Holding Company:

Company Name : AGRI SCIENCES TARIM VE ILAC UR. SAN. TIC. LTD. STI.
Address : Bekir Saydam Caddesi Pancar No: 31 Torbali / IZMIR
Telephone : +90 0232 864 13 33
Fax : +90 0232 864 16 79

1.4 Emergency Contact Telephone:

In case of an emergency please call +90 0232 864 13 33.

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2. COMPOSITION AND INFORMATION ON INGREDIENTS:

| Material | g/L | CAS No | EINECS/ELINCS | Hazard | R ¹ | Classification |
|------------|---------------------------------------------------------------|------------|---------------|--------|----------------|----------------|
| Fosetyl-Al | 80 | 39148-24-8 | 254-320-2 | Xi | R41 | Xi; R41 |
| Others | Out of classification due to not including dangerous material | | | | | |

- ¹ R explanations are under section 16.

3. HAZARD IDENTIFICATION:



Xi: Irritant

R41: Serious harm risk on eyes.

PRODUCT IS PREPARED BASED ON REGULATION ON PREPARATION AND DISTRIBUTION OF SAFETY DATA SHEETS ABOUT HAZARDOUS MATERIALS AND PREPARATIONS (O.G. issue no 27092 dated 26/12/2008).

4. FIRST AID MEASURES:

Poison symptoms: In case of over dosage, dormancy, thrilling, dyspnea, cramp

First Aid Measures: If he pesticide swallowed in powder form, take the patient to fresh air and take the pesticide label with you. If contaminated eye or skin, wash with plenty of water and soap.

Antidote and Necessary Information: There is no special antidote. Treatment is applied as per the symptoms.

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5. FIRE FIGHTING MEASURES

Personal Protective Equipment during fight: Do not inhale the occurred gases during explosion and fire. Use air-independent respiratory mask during fire if possible.

Dangers: Consider carbon monoxide (CO), nitrogen oxide (NO_x) and phosphor oxide during fire.

Extinguishers: Foam, carbon dioxide, extinguishing powder

Other Details: Take the product away from the fire point. Get cool the containers with water. If possible, use sand or earth after extinguishing water.

6. ACCIDENTAL RELEASE MEASURES:

General Information: Please use the personal protection equipment defined under Section 8.

Personal Precautions: Do not touch spilled product or contaminated surfaces. Do not eat, drink or smoke while handling spilled product.

Clean-up Methods: The poured material is collected with a liquid catcher material (for instance; sucking sand, sawdust, chemical binder). Place the product into tight plastic containers and keep safely until it is disposed. Contaminated materials and surfaces should be cleaned in compliance with environmental regulations.

Additional Precautions: Refer to Section 7 for safe handling instructions. Refer to Section 8 for personal protections equipment. Refer to Section 13 for disposal.

7. HANDLING AND STORAGE

Handling : Please use the personal protection equipment specified under Section 8. Do not eat or drink while using. Prevent the contact with mouth, skin and eyes. Do not inhale. Wash your hands after using. Other security precautions are not required except of stated warnings during using the closed package. Use only in rooms, in which there is a local sucking device.

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Storage : Keep in original package in cool, dry and well ventilated places. Keep away from food and animal feed items. Keep away from direct sunlight. Keep against freezing. Keep it in places that children cannot reach.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Precautions: Ensure appropriate general or local ventilation to keep the product concentration under allowed limits.

Personal Protection Equipment:

Eye : Use eye protection equipment compliant with EN 166.

Skin : Use protective clothing and appropriate gloves. Use 2 layers of clothing, if possible. Use CE marked Nitrile Rubber (min. 0.40 mm thick). Contaminated gloves should be washed. Any gloves that cannot be cleaned inside and outside should be disposed.

Respiratory : Use respiratory apparatuses compliant with EN 149:2001. Any respiratory protection apparatus should only be used for short term operations, as a part of risk minimization measures, e.g. in case of local ventilation. Comply with operation instructions and warnings of the manufacturer during use of respiratory protection apparatuses.

Hygiene Measures: Do not eat, drink or smoke while handling the product. Wash your hands each time before eating, drinking, smoking or going to the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Solid, granule
Color : Brown
Odor : Light Characteristic
pH : 3-4 %1 (20°C)
Soluble in Water : Disperse

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10. STABILITY AND REACTIVITY

- Conditions to be avoided** : Extreme degrees and direct sun light
- Dangerous Reactions:** : There is no dangerous reaction in appropriate storage and usage.
- Dangerous Degradation Products:** : There is no dangerous reaction in appropriate storage and usage.

11. TOXICOLOGICAL INFORMATION

Fosetyl-Al Technical Material:

Acute Oral LD₅₀ rat >7080 mg/kg.

Skin and Eye Acute percutaneous LD₅₀ rat and rabbit >2000 mg/kg. It is not irritant to skin.

Respiratory LC₅₀ (4 hours) rat >5.11 mg/l air.

NOEL NOAEL (2 years) dog 300 mg/kg b.w. daily. ADI/RfD (EC) 3 mg/kg b.w. [2006]; (EPA) 2.5 mg/kg b.w. [2003].

Others: It is not teratogen, mutagenic and cancer genic

Toxicity Class: WHO (a.i.) Ia; EPA (formulation) III

12. ECOLOGICAL INFORMATION

Fosetyl-Al Technical Material:

Bird Acute Oral LD₅₀ bobwhite quail >8000 mg/kg.

Diet LC₅₀ (5 days) bobwhite quail and mallard ducks >20 000 ppm diet.

Fish LC₅₀ (96 hours) rainbow trout >122, bluegill sunfish >60 mg/l.

Daphnia LC₅₀ (48 hours) >100 mg/l.

Algae EC₅₀ (90 hours) *Scenedesmus pannonicus* 21.9 mg/l.

Api LD₅₀ (96 hours, oral) >461.8 µg/bee; (contact) >1000 µg/bee

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13. DISPOSAL INFORMATION

Product : Do not dispose it together with household wastes. Waste residue should not be spilled into wastewater canals. Any product wastes should be disposed of in compliance with Hazardous Wastes Control Regulations.

Contaminated Materials : Empty containers should not be used for other products. Completely emptied and rinsed containers should be disposed in compliance with regulations. Non-clearable containers should be disposed of as hazardous materials.

14. TRANSPORTATION INFORMATION

ADR/RID/ADNR

UN-No. : 2783

Hazard Mark : 6.1

Packing Group : III

Product type : UN 2783 ORGANOPHOSPHORUS COMPOUNDS, SOLID, TOXIC (INCLUDES FOSETYL AL)

IMDG

UN-No. : 2783

Class : 6.1

Packing Group : III

Marine Pollutant : -

Product type : UN 2783 ORGANOPHOSPHORUS COMPOUNDS, SOLID, TOXIC (INCLUDES FOSETYL AL)

IATA

UN-No. : 2783

Class : 6.1

Packing Group : III

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Product type : UN 2783 ORGANOPHOSPHORUS COMPOUNDS, SOLID,
TOXIC (INCLUDES FOSETYL AL)

15. REGULATORY INFORMATION

This data sheet is prepared based on regulation on preparation and distribution of safety data sheets about hazardous materials and preparations (O.G. issue no 27092 dated 26/12/2008).

Hazard Marks and Symbols:



Xi: Irritant

Hazardous Materials Listed on the Label

Includes Fosetyl-Al

Risk Phrases:

Physicochemical:-

Health :

R41: Serious harm risk on eyes.

Environment :-

Safety Phrases:

S1/2: Keep it locked and a place where children cannot reach.

S25: Avoid contacting with eyes.

S26: In case of contact with eyes, wash plenty of water and call a doctor.

S39: Wear appropriate protective glass/mask.

S46: If swallowed, call a doctor. Show the container or label.

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Important Labeling:

Follow instructions to avoid personal and environmental risks.

Toxicity Class: WHO (a.i.) Ia; EPA (formulation) III

16. OTHER INFORMATION

Xi : Irritant

All Risk Phrases under Section 2:

R41: Serious harm risk on eyes.

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Release Date 15/08/2012
MSDS No FORM_MSDS_R&D_076_00
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Prepared by : Secil CANAYAKIN

This material safety data sheet is provided as a supplement to instructions of manufacturer; however it does not replace instructions of manufacturer. The information provided in this sheet only conforms to the regulatory criteria known at the time of the preparation of Safety Data Sheet. Required data are gathered in accord with "Regulation on Preparation and Distribution of Safety Data Sheets about Hazardous Materials and preparations (O.G. issue no 27092 dated 26/12/2008)". Concerned organizations and persons are invited to comply with the abovementioned regulation