

MATERIAL SAFETY DATA SHEET

NAME OF MATERIAL/PREPARATION	MANDATE
Date of Preparation	09/04/2014
Date of Issue	09/04/2014
MSDS No	FORM_MSDS_R&D_126_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 : MANDATE
Product Content : Thiophanate Methyl 700g/kg
Formulation Form : WP (WETTABLE POWDER)

Thiophanate Methyl
CAS No: 23564-05-8
EC No: 245-740-7
FRAC: 1, B1 MBC: thiophanate

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/Kg	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
Thiophanate Methyl	700	23564-05-8	245-740-7	Muta.Cat.3; Xn;N	R20,R,43 R50/53 R68	Xn;R20 R43 R68 N;R50/53
Others	Out of classification due to the fact that it does not include hazardous material					

- ¹ R explanations are under section 16.

3. HAZARD IDENTIFICATION:



Xn: HARMFUL



N: DANGEROUS FOR THE ENVIRONMENT

R 20: Harmful if inhaled.

R43: May cause sensitivity in case contact with skin.

R50/53: Too toxic for aquatic organisms and may cause long-term adverse effects in the aquatic environment

R68: Possible risk for untreatable effects

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4. FIRST AID MEASURES

Swallowing: Give a glass of water to the patient. Do not induce vomiting. If the symptoms persist, call a doctor.

Eye Contact: If contaminating the eyes, wash with plenty of water. If any, remove lenses.

Skin Contact: Take off the contaminated clothes. Wash with plenty of water and soap including hair and nails.

Inhalation: Move the patient to fresh air. If the patient does not inhale, apply artificial respiration. If the symptoms persist, call a doctor.

5. FIRE FIGHTING MEASURES

Extinguisher: Water spray, CO₂, dry powder and foam. Intervene in fire without creating danger as possible. Wear protective mask.

In well-ventilated areas: Combined-filter face mask

In closed areas: Isolation device (environment-proof, self-contained air respiratory device) Prevent the penetration of fire water to environment.

Harmful burning products: May emit irritant and quite toxic gas due to thermal decomposition or burning.

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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. While handling with spilled product, do not eat, drink and smoke. Keep people and animals away from the area.

Clean-up Methods: Firstly, sweep the contaminated area and keep it in a closed container for disposal. Ensure that it does not contaminate sewage system and water channels. Wash the area with plenty of water and detergent.

7. HANDLING AND STORAGE

Handling : Use the personal protective equipment stated in 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.

Storage : Store in the original container in dry, cool and well-ventilated places. Keep away from food, drink and animal feeds. Protect against direct sun light. Keep in the places where children cannot reach

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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 : Powder
Color : Beige, brown
Odor : Slightly characteristic
Density : $0.37 \pm 0,05 \text{ g/cm}^3$ (20⁰C)
pH : 5-8 (1%) (20⁰C)

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10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Conditions to be avoided and incompatible materials.	: Extreme temperatures and direct sun light
Incompatible materials	: Copper compounds
Dangerous reaction used in appropriate way.	: No dangerous reaction as long as stored or
Dangerous Decomposition Products	: Nitride, sulfite and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Thiophanate Methyl Technical Material:

Thiophanate Methyl
LD50 oral rat: 5000 mg/kg
LD50 dermal rat: > 2000 mg/kg
LC50 inhalation rat: 2 mg/l air

12. ECOLOGICAL INFORMATION

Thiophanate Methyl Technical Material:

Japanese quail oral LD50: >5000 mg/kg
Not toxic for bees. Bee LD50: > 100µg/bee
Carp LC50: 7,8 mg/L (96 h)
Daphnia EC50 (48 h): 20,2 mg/l

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13. DISPOSAL INFORMATION

Product : Do not dispose of the wastes with household wastes. Do not pour the remaining wastes to the sewage system. Dispose of them according to the Directive of Hazardous Waste Control.

Contaminated Materials: Do not use the empty packages for other products. Dispose the fully-discharged and shook packages in due form. Dispose of the non-cleaned packages as hazardous waste.

14. TRANSPORTATION INFORMATION

ADR/RID/ADNR

UN-No. : 3077
Hazard Mark : 9
Packing Group : III
Product type : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Thiophanate Methyl)

IMDG

UN-No. : 3077
Class : 9
Packing Group : III
Marine Pollutant : Yes
Product type : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Thiophanate Methyl)

IATA

UN-No. : 3077
Class : 9
Packing Group : III
Product type : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Thiophanate Methyl)

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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:



Xn: HARMFUL



N: Dangerous for Environment

Hazardous Materials Listed on the Label

Includes Thiophanate methyl

Risk Phrases:

Health:

R 20: Harmful if inhaled.

R43: May cause sensitivity in case of contact with skin.

R68: Possible risk for untreatable effects.

Environment:

R50/53: Too toxic for aquatic organisms and may cause long-term adverse effects in the aquatic environment

Safety Phrases:

S1/2: Lock it up and keep out of the reach of children.

S13: Keep away food, drink and feedstuff.

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S29/56: Do not pour to sewage system. Dispose this material and the container in dangerous and special waste collecting places.

S24: Avoid from contact with skin.

S36/37: Wear suitable protective clothes and gloves.

S46: Contact a doctor if swallowed, show the container or label.

Important Labeling:

Follow instructions to avoid personal and environmental risks.

16. OTHER INFORMATION

All Hazard Signs and Phrases under Section 2

Xn: Harmful

N: Dangerous for Environment

All Risk Phrases under Section 2:

R 20: Harmful if inhaled

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R50/53: Too toxic for aquatic organisms and may cause long-term adverse effects in the aquatic environment

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Prepared By : Ceyda ÇALIŞKAN

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.