AGROW ALLIED
Ventures Pvt. Ltd

MATERIAL SAFETY DATA SHEET

1.Product and Company Identification

Product Name : Metalaxyl 98% TC

Chemical Name : Methyl N-(2-methoxyacetyl)-N-(2,6-xylyl)-DL-alaninate

Type : Fungicide

Molecular formula : $C_{15}H_{21}NO_4$

2.Composition/Information on ingredients

Chemical Name	CAS#	Percent or content(w/w)
Metalaxyl	57837-19-1	98%
Other associates	-	2.0%

3.Health Hazards Identification

Symptoms of Acute Exposure: May cause eye irritation
Hazardous Decomposition Products: Can decompose at high temperature forming toxic gases
Unusual fire, Explosion and Reactivity Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

4.First Aid Measures

Ingestion: If swallowed, call a Poison control center or a Doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless to do so by a Poison Control center or Doctor. Do not give anything by mouth to an unconscious person.

Eye: If in eyes, Hold eye open and rinse slowly and gently with water for 15 –20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin: Wash affected area with plenty of soap and water for 15 – 20 minutes. Remove contaminated clothing. Launder contaminated clothing separately. Get medical attention.

Inhalation: Move person to fresh air. If person is not breathing give artificial respiration, preferably mouth to mouth if possible. Call a Poison control center or doctor for further treatment advice.

Note to Physician: There is no specific antidote if this product is ingested. Treat symptomatically

5.Fire Fighting Measures

Flash point : >40°C
Flammable Limits (% in Air): Not Available
Auto ignition Temperature: Not Available
Unusual Fire, Explosion and Reactivity Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.
In case of Fire: Use dry, chemical, foam or CO_2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.
Prevent use of contaminated buildings, area and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6.Accidental Release Measures

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in protective equipment section. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7.Handling and Storage

Store the product in a well-ventilated, secure area out of reach of children and domestic animals. Do not use or store near heat or open flame. Do not store food, beverages, tobacco or feed in storage area. Prevent eating, drinking, smoking and cosmetic application in areas where there is a potential exposure to the product. Wash thoroughly with soap and water after handling.

8.Exposure Controls/Personal Protection

ENGINEERING CONTROLS
Use adequate ventilation to keep vapor, hydrogen sulfide and dust concentrations of this product below occupational exposure limits and flammability limits, particularly in confined spaces. Use explosion-proof equipment and lighting in classified/controlled areas.

EYE/FACE PROTECTION
Safety goggles are recommended for excessive dust exposure. Use face shield for protection against molten sulphur.

SKIN PROTECTION
Avoid repeated or prolonged skin contact. For protection from molten sulphur, gloves and skin protection constructed of leather or heat resistant materials are recommended.

RESPIRATORY PROTECTION
If a hydrogen sulfide hazard is present (that is, exposure potential above H_2S permissible exposure limit), use a positive-pressure SCBA or Type C supplied air respirator with escape bottle.

9.Physical and Chemical Properties

APPEARANCE:	white powder
ODOR:	characteristic
MELTING POINT:	63.5-72.3°C
VAPOR PRESSURE:	0.75 mPa (25ºC)
SPECIFIC GRAVITY:	1.20
SOLUBILITY:	26.0 g/L @ 25ºC

10.Stability and Reactivity

Chemical stability: Stable under normal use and storage conditions.

Conditions to avoid: None known

Incompatibility with other materials: None known

Hazardous decomposition products: Can decompose at high temperatures forming toxic gases.

Hazardous polymerization: Will not occur

11.Toxicological Information

Oral LD50 (Rat): 633 mg/kg
Dermal LD50 (Rabbit):>3100 mg/kg
Inhalation LC50 (Rats): >3600 mg/m^3
Eye Irritation (Rabbit): Slight irritating
Skin Irritation (Rabbit): Non Irritating

12.Ecological Information

Toxicity
Japanese quail: LD50 923 mg/kg
Mallard ducks: LD50 1466 mg/kg
Bluegill sunfish: LC50 >100 mg/l
Daphnia: LC50 >28 mg/l
Algae: EC50 33 mg/l
Bees: non toxic
Worms: LC50 >1000 mg/l

13. Disposal Considerations

Product: Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Contaminated Packaging: Dispose of as unused product.

14.Transport Information

UN-Number: 3077
Class: 9
Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s
Marine pollutant: yes

15.Regulatory Information

Not applicable

16.Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present

MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.