

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Metalaxyl 35% WP
Substance: Wettable powder of Metalaxyl
IUPAC name:
Chemical name of active ingredient: Methyl-*N*-(methoxyacetyl)-*N*-(2,6-dimethylphenyl)-*DL*-alaninate; methyl 2-{[(2,6-dimethylphenyl)methoxyacetyl]amino}propionate
CA name:
Methyl-*N*-(2,6-dimethylphenyl)-*N*-(methoxyacetyl)-*DL*-alaninate
Product Use: Agricultural fungicide
Manufacturer: Spinochem Tech Co.,Ltd
Address: No.2278,Zhaochong Rd,Shanghai,China
Emergency telephone No.: +86 21 64238765

2. HAZARDS IDENTIFICATION

According to Regulation (EC) No1272/2008

Reproductive toxicity (Category 2)

Skin sensitization (Category 1)

Acute aquatic toxicity (Category 1)

Acute toxicity, Oral (Category 4)

Chronic aquatic toxicity (Category 3)

According to European Directive 67/548/EEC as amended

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful if swallowed. May cause an allergic skin reaction. Possible risk of harm to the unborn child.

Label elements

Pictogram

Signal word: Warning

Hazard statement(s)



H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H361 Suspected of damaging the unborn child.

H400 Very toxic to aquatic life.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P321 Specific treatment (see supplemental first aid instructions on this label).

P330 Rinse mouth.

P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazard symbol(s)

Xi Irritant

T Toxic

C Corrosive

N Hazardous to the aquatic environment

Other hazards None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No.	EC No.	Index No.	Content
Metalaxyl	57837-19-1	260-979-7	607-425-00-6	35% (w/w)
Others	Not applicable	Not applicable	Not applicable	Up to 100%

4. FIRST AID MEASURES

General advice

Have the product container, label or Safety Data Sheet with you when going for treatment. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given. Move out of dangerous area.

If ingested

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

If inhaled

Move to clear atmosphere. Get medical attention. Treat symptomatically and supportively.

In case of skin contact

Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items, which cannot be decontaminated, including leather articles such as shoes, belts, and watchbands.

In case of eye contact

Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling and/or in section 11

Note to physician

There is no specific antidote available. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO_x).

Advice for firefighters

Wear protective clothing and self-contained breathing apparatus, avoid breathing hazardous vapours, keep upwind. Do not allow run-off from firefighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

Method and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Do not handle material near food, feed or drinking water. Avoid high concentrations of dust in air and accumulation of dust on equipment. An airborne dust of this material can create a dust explosion. When handling and processing this material local exhaust ventilation may be required to control dust and reduce exposure to vapors. To prevent dust explosions employ bonding and grounding for operations capable of generating static electricity.

Conditions for safe storage, including any incompatibilities

Do not store this material near food, feed or drinking water. Store in a well-ventilated

area. Store in a dry area. Material is combustible; do not ignite. Dense packing of unvented stacks of bags may lead to product decomposition posing a fire hazard. Decomposition produces a foul odor. Check for hot containers and immediately remove to open areas for disposal. Keep container tightly closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters.

Exposure limits

No data available.

Acceptable Daily Intake (ADI):

(JMPR) 0.08 mg/kg b.w. [2002, 2004] (group ADI for metalaxyl and metalaxyl-M);
(EPA) 0.08 mg/kg b.w. [1995].

No-observable-effect-level (NOEL):

(6 months) for dogs 7.8 mg/kg b.w. daily.

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Use mechanical exhaust or laboratory fume hood to avoid exposure.

Personal protection equipment

Eye Protection: Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

Skin Protection: The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when handling this product.

Body protection Complete suit protecting against chemicals, The type of

protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable Dust Mask.

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

User safety recommendations:

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellowish powder
Vapor Pressure: Not applicable for the end-use product, refer to the active substance, 0.75mPa (25°C, Metalaxyl)
Relative density: Test and report.
Water solubility: Wettable.
Partition coefficient: Not applicable for the end-use product, Refer to the active substance, K_{ow} $\log P=1.75$ (25 °C, Metalaxyl)

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available.

Conditions to avoid

Should be kept in a cool place, preferably below 30°C. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatible materials

Avoid contact with oxidizing agents, strong acids and strong bases.

Hazardous decomposition products

Other decomposition products - No data available.

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

There is no data available for the end-use product, so the technical information is listed for the reference.

Acute Oral	Rats: LD ₅₀ 633mg/kg Mice: LD ₅₀ 788mg/kg Rabbits: LD ₅₀ 697mg/kg
Inhalation	Rats: LC ₅₀ (4 h) >3600mg/m ³ air
Skin and Eye	Rats: Acute percutaneous LD ₅₀ >3100mg/kg Rabbits: Slight irritant to eyes; not irritant to skin.
Skin sensitization	Not a skin sensitizer in guinea pigs.

12. ECOLOGICAL INFORMATION

There is no data available for the end-use product, so the technical information is listed for the reference.

Metalaxyl:

Eco-toxicity(ePM)

Bird	Mallard ducks:	LC ₅₀ (8 d)>10000mg/kg. LD ₅₀ (8d) 1466mg/kg
	Bobwhite quail	LC ₅₀ (8 d) >10000mg/kg
	Japanese quail:	LD ₅₀ (7d) 923mg/kg LC ₅₀ (8 d)>10000mg/kg
Fish	Rainbow trout:	LC ₅₀ (96-hour) > 100mg/L
	Bluegill sunfish:	LC ₅₀ (96-hour) > 100mg/L
	Carp	LC ₅₀ (96-hour) > 100mg/L

Daphnia	Daphnia	LC ₅₀ (48 h) > 28mg/L
Algae	<i>Scenedesmus subspicatus</i>	LC ₅₀ (5d) 33 mg/L.
Other aquatic spp	mysid shrimps (<i>Mysidopsis bahia</i>)	EC ₅₀ (96h) 25mg/L.
	eastern oysters (<i>Crassostrea virginica</i>)	EC ₅₀ (96h) 4.6mg/L.
		LD ₅₀ (48h, contact) >200µg/bee.
Bees	Bees	LD ₅₀ (48h, oral) >269.3µg/bee. Not toxic to bees.
Worms	<i>Eisenia foetida</i>	LC ₅₀ (14d) >1000mg/kg soil.

13. DISPOSAL CONSIDERATION

Triple or preferably pressure rinse containers before disposal. Add rinsing to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Dispose of washings, contaminated materials, used absorbents and other waste materials as directed by local regulations

14. TRANSPORT INFORMATION

UN number

ADR/RID: 3077

IMDG: 3077

IATA: 3077

UN proper shipping name

ADR/RID: Environmentally hazardous substance, Solid, N.O.S

IMDG: Environmentally hazardous substance, Solid, N.O.S

IATA: Environmentally hazardous substance, Solid, N.O.S

Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

Packaging group

ADR/RID: III IMDG: III IATA: III

Environmental hazards

ADR/RID: no IMDG Marine pollutant: yes

Special precautions for user

No data available.

15. REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture**

No data available

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we has been advised of the possibility of such damages.