

Product Safety Data Sheet

1. Chemical product and company identification

- 1.1. **Prepared Date** : JAN . 2025
1.2. **Product information** :-
Trade name : **Metagold 480 EC**
1.3. **Information about manufacturer / supplier :**
Saudi Delta Company for Chemical Industries
Riadh – Saudi Arabia – 3rd Industrial City
Tel. 00966-11-2654533 Fax. 00966-11-2654532
P.O. Box 355809 Riyadh 11383 Saudi Arabia

2. Information on ingredients

2.1. **Chemical properties (Component substances)**

The product is a mixture of one active ingredient, emulsifiers, and solvent.

- Metalaxyl M 48% w/v (a.i.) (Systemic fungicide)

- **Emulsifiers** 6% w/v (Anionic / non- ionic type)

- **Aromatic Solvent** Up to 100% v

2.1.1. **Metalaxyl M :**

- Common Name: Metalaxyl M (BSI, ISO, ANSI)

- Chemical Names: Methyl N - (2-methoxyacetyl) -N- (2,6-xylyl) - DL-alaninate (IUPAC).

Methy lN-(2,6-dimethylphenyl)-N-(methoxyacetyl)-DL alaninate (CA).

- CAS No: 706301-17-0

- Molecular Weight: 279.3

- Molecular Formula: C₁₅H₂₁NO₄

- Physical form: Pale yellow to light brown ,viscous liquid.

- Melting point: -38.7°C

- Vapour pressure: 3.3 mPa at 25°C

- Specific gravity: 1.25 at 20°C

- Boiling point : 270°C with decomp.

- Flash point : 179°C

- Solubility: In water 26 gm/l (25 °C) , In n-hexane 59 g/l;miscible with acetone,

Ethyl acetate,methanol ,dichloromethane,touene,n-octanol .

-Stability: Hydrolytically stable under acidic and neutral conditions (DT50>200d)

2.1.2. Emulsifiers :

A combined anionic/nonionic emulsifiers specially intended for formulation of pesticide.

Composition : 15-30% calcium dodecyl benzenesulfonate.
10-20% n-Butanol.
30-60% polyalkyleneoxidederivative.

Appearance : Clear yellow-brown liquid and cloudy yellow liquid.

Density : 0.99-1.01 gm/ml (20°C).

Flash point : 37 °C.

Pour point : 2-3 °C.

Viscosity : 1150 mPa s.

Solubility : Soluble in Isopropanol, Octanol, water, and exylene
in soluble in kerosene and mineral oil.
in soluble in kerosene and mineral oil.

2.1.3. Aromatic Solvent (Xylene):

CAS No. : 68920-06-9 SHA: 086803

Composition : Dimethylbenzene (ortho, meta, and para isomers).

Properties : Volatile. Petroleum distillate (75-100% aromatic hydrocarbon), B.P.: 175-300 °F.

3. Hazard Identification

3.1. Dangerous Substances: NONE

3.2. Important Hazardous: May cause sensitization by inhalation and skin contact.

3.3. Symptoms relating to use: Prolonged and reported exposure may cause skin irritation, conjunctivities and bronchitis.

4. First aid Measures

If Swallowed : Do not induce vomiting. Contains xylene-range aromatic solvent.
Call a physician immediately. See

“Note to Physician“.

If In Eyes : Flush with plenty of water while holding eyelids open. Call a physician immediately

If On Skin : Wash hands with soap and water each time before eating , drinking , or smoking. At the end of the working day, bathe entire body with soap and plenty of water.

If Inhaled : Remove to fresh air, Support respiration and contact a physician if necessary.

5. Fire Fighting Measures

5.1. Extinguishing media:

- 5.1.1. **Suitable:** Carbon dioxide, foam, water fog, dry chemical and halogenated agents.
- 5.1.2. **Not to be used:** Don't use water except in case important fire.
- 5.1.3. Protection against fire: Keep a way from sources of ignition.

6. Accidental Release Measures

6.1. Personal precautionary measures:

- 6.1.1. **Respiratory protection:** In case of insufficient ventilation wear pesticide respirator jointly approved by the local authorities.
- 6.1.2. **Protective gloves:** wear heavy duty, natural rubber gloves, or chemical resistant gloves such as Barrier laminate or Nitrile Rubber or. Neoprene rubber or viton.
- 6.1.3. **Eye protection:** wear safety goggles.
- 6.1.4. **Other protection:** wear water-proff pants, coat, hat, rubber boots or rubber overshoes.

6.2. Environmental Precaution: Stop any eventual leakage.

6.3. After spillage / leakage on soil: Liquid spillage should be dammed off and pumped into containers; soak up remainder with absorbent material and dispose of in accordance with local regulations.

7. Handling and Storage

7.1. Don't apply when weather conditions favor drift from treated area. Don't contaminate

lakes, streams, ponds. When using don't eat, drink, or smoke. Don't breath spray.
Wash hands and exposed skin before meals and after work.

Wash out container thoroughly and dispose of safety. Store in original container in a cool, dry, well-ventilated, secure area out of reach of children and animals store in original container, tightly closed in a safe place.

8. Exposure controls , Personal Protections .

- 8.1. **Personal Protection:** Don't breath spray, after treatment, wash and change clothes prior anything else like eating, drinking, or smoking.
- 8.2. **Respiratory Protection :** Wear a suitable mask.
- 8.3. **Skin Protection :** Wear a suitable protective clothing mask.
- 8.4. **Eye Protection :** Wear eye, face protection.
- 8.5. **Ingestion :** Don't eat, drink, or smoke during application.

9. Physical and chemical properties

- | | |
|-------------------------------|------------------------|
| 9.1. Shape | : Liquid |
| 9.2. Colour | : brown liquid |
| 9.3. Odour | : Aromatic odour |
| 9.4. Product Use | : (Fungicide) |
| 9.5. Melting point | : Not applicable |
| 9.6. Density (gm/ml) (20°) | : 0.9898 g/ml |
| 9.7. Viscosity (CPS) 25 °C | : 25 |
| 9.8. Solubility in water | : Forms white emulsion |
| 9.9. Flash point °C | : >28°C |
| 9.10. pH (1% aq. emul.) w/v | : 4-8 |
| 9.11. Flammable limits | : Flammable |

10. Stability and Reactivity

- 10.1. **Hazardous Decomposition :** Metalaxyl M stable. Hydrolysis half-life in aqueous buffer at PH 9 is about 116d, at 20 °C
- 10.2. **Environmental Fate :**
Animals : The main metabolite in urine and faeces is 5-(4-chlorophenyl)-N-(cis-4-hydroxycyclohexyl)-4-methyl-trans- 2-oxothiazolidine-3-carboxamide

Soil /Environment : DT50 in clay loam at 15 ° C ,8 d. In soil ,undergoes oxidation to the corresponding hydroxy and carbonyl compounds . K_{OC} 6200

11. Toxicological Information

- 11.1. Acute oral LD50 for rats and mice > 1500 mg/kg .
- 11.2. Acute percutaneous LD50 for rats 4000 mg/kg , rabbits. Slight irritating eyes
- 11.3. Inhalation LC50 (4 hr) for rats >2.29 mg/L air .
- 11.4. NOEL (Tech.) : In 2 years for rats 23.1 mg/kg b.w ; (1 y) for dogs 2.87 mg/kg b.w , rats 70 mg/kg diet.
- 11.5. ADI (JMPR) 0.03 mg/kg b.w (1991)
- 1.6. Toxicity class : WHO III; EPA IV

12. Ecological Data

- 12.2. Birds :** LD50 for male Jpanese quail > 5000, mallard ducks >2510 , bobwhite quail 1988 mg/kg.
- 12.3. Fish:** LC50 (96 hr) for rainbow trout >100, bluegill sunfish 11.6 mg/l ; (48h) for carp 3.7 mg/l .
- 12.4. Bees:** Not toxic to bees LD50 by topical application > 100 µg/bee contact >100µg/bee.
- 12.5. Daphnia:** LC50 (48 hr) 1.2 mg /L .

13. Disposal Considerations

- 13.1. Pesticides Disposal**
Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or reinstate is a violation of Federal law. If these wastes cannot be disposed of use according to label instructions contact.
Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
- 13.2. Container disposal**
13.2.1. Metal containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by local authorities. Do not cut or weld metal containers.
13.2.2. Plastic containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by authorities, by burning. If burned, stay out of smoke.
13.2.3. Returnable / Refillable Sealed Containers: Don't rinse container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase.

14. Transport Information

GGVE/GGVS : 6.1/III	RID/ADR: 6.1
IMDG-Code : 6.1/ III	EMS:---- MFAG : ----
IATA/ICAO : 6.1 III	UN: ---- PAX: ---- CAO: ----

15. Regulatory Information

- 15.1. Toxicity Classifications :** Moderately Hazardous
- 15.2. Warning Symbol :** X
- 15.3. R-Phrase**
R36/38 : Irritating to eyes and skin .
R22 : Harmful if swallowed

15.4 S-Phrase

- S41 : In case of fire and /or explosion don't breath fumes .
S22 : Don't breath dust .
S24/25 : Avoide contact with skin and eyes.
S46 : If swallowed, seek medical advice immediately and show this
container or lable .

16. Other Information

The producer warrantees the quality of this product in the original closed packagin, and of its conformity with authority agreement during 2 years .