

# METANIL 480 SL

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** METANIL 480 SL  
**Other identifier:** Metalaxyl-M (Mefenoxam) 480 SL  
**Recommended use:** Fungicide  
**Restrictions on use:** Agriculture, small-scale farming  
**Supplier:** Villa Crop Protection (Pty) Ltd.  
**Co. Reg. No.:** 1992/002474/07  
 PO Box 10413  
 Aston Manor, 1630, South Africa  
**Telephone:** (011) 396 2233  
**Fax:** (011) 396 4666  
**Website:** [www.villacrop.co.za](http://www.villacrop.co.za)

**Emergency telephone numbers:**  
**24 Hr Transport / Spill emergency no:**  
 (Hazcall24) +27 86 044 4411  
 (Client: Villa Crop Protection)  
 Griffon Poison Information Centre +27 82 446 8946  
 (Client: Villa Crop Protection)  
**Poisoning Emergency telephone numbers:**  
 Griffon Poison Information Centre +27 82 446 8946  
 Poisons Information Centre +27 861 555 777

## 2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
<b>Health</b>		
Oral	Acute Toxicity 4	H302
Dermal	Acute Toxicity 5 Skin Irritation 3	H313 H316
Eye	Eye damage 1	H318
Inhalation	Acute Toxicity 5	H333

**The most important adverse effects:**  
**Physicochemical effects:** None known  
**Human health effects:**  
 Causes serious eye damage.

### Label elements:



**Signal word:** Danger

**Hazard statements:**  
 H302: Harmful if swallowed.

H313: May be harmful in contact with skin.  
 H316: Causes mild skin irritation.  
 H318: Causes serious eye damage.  
 H333: May be harmful if inhaled.

### Precautionary statements:

P264: Wash hands and face thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.  
 P271: Use only outdoors or in a well-ventilated area.  
 P280: Wear impervious rubber gloves and chemical safety goggles.  
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.  
 P310: Immediately call a POISON CENTRE.

### Other hazards:

None known.

### Toxicity:

Classification according to GHS: Category 4  
 Classification according to WHO: Group II  
 Classification according to GPIC: Category II

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance / Mixture:** Mixture

Composition:

Chemical name	CAS	Conc.	Classification EC 1272/2008
Metalaxyl-M (Mefenoxam)	70630-17-0	480 g/l	Acute Toxicity 4 (H302) Eye Damage 1 (H318)
Fatty alcohol-polyoxyethylene ether	71060-57-6	< 5%	Acute Toxicity 4 (H302) Eye Damage 1 (H318)
Tristyrylphenol ethoxylates	99734-09-5	< 10%	Aquatic Chronic 3 (H412)
Calcium Dodecylbenzene Sulfonate	26264-06-2	< 5%	Acute Toxicity 4 (H302) Skin irritation 2 (H315) Eye Damage 1 (H318) Aquatic Chronic 4 (H413)
Cocoamidopropyl Betaine	86438-79-1	< 5%	Eye Damage 1 (H318)
Organo-siloxane	N/A (99% 1067-25-0)	< 1%	Flammable liquid 3 (H226) Skin irritation 2 (H315)

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## 4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure.

**Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation persists or if breathing is irregular.

**Skin:** Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists.

**Eyes:** Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after five (5) minutes and continue rinsing. **Seek medical attention immediately; this product causes serious eye damage.**

**Ingestion:** Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**Anticipated acute effects:**

Harmful if swallowed.

May be harmful in contact with skin.

Causes mild skin irritation.

Causes serious eye damage.

Harmful if inhaled.

**Anticipated delayed effects:** None known.

**Most important symptoms / effects:** None known.

**Advice to physician:** Treat symptomatically and supportively. No specific antidote known.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Use water spray, carbon dioxide, alcohol-resistant foam or dry chemical for small fires and alcohol-resistant foam for large fires.

**Unsuitable Extinguishing Media:** High-volume water jet. Use a water jet only to cool heated containers.

**Specific hazards:** Hazards or hazard products arising from combustion. Backfire is possible over a large distance.

**Special fire-fighting procedures:** Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Remain upwind of fire. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal.

**Personal protective equipment:** Wear NIOSH / MSHA approved self-contained breathing apparatus and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid contact with skin **and eyes**. Do not breathe in spray mist, fumes or vapours. Ventilate area of spill or leak, especially in contained areas.

**Protective equipment:** Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

**Emergency procedures:** Alert firefighting personnel, evacuate unprotected personnel and animals.

**Environmental Precautions:** Prevent spilled product from entering sewers, waterways or ground water.

**Methods and Materials for Containment:** Contain spilled product by diking area with sand or earth.

**Methods and Materials for Clean-up:** Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

## 7. HANDLING AND STORAGE

**Handling:**

**Precautions for safe handling:** Harmful if swallowed. Avoid contact with skin **and eyes**. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.

**General occupational hygiene:** Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

**Storage:**

**Conditions for safe storage:** Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed in an isolated, dry, cool and well-ventilated area. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

**Incompatible substances and mixtures:** Refer to product label.

**Packaging material:** Plastic containers.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Permissible concentration

Components	Exposure limits	Type of exposure limit	Source
Metalaxyl-M (Mefenoxam)	5 mg/kg	TWA	OES

### Engineering Controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

### Personal Protective Equipment:

**Respiratory Protection:** Use a NIOSH approved, air-purifying respirator with cartridges / canisters approved for organic mists & vapours.

**Hand Protection:** The use of chemically protective impervious gloves is recommended to prevent against skin contact.

**Eye Protection:** Wear chemical safety goggles to prevent against eye contact. This product cause serious eye damage. Contact lenses are not protective eye devices.

**Skin and Body Protection:** Employees must wear appropriate protective impervious clothing, rubber boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

**Emergency eyewash:** Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Light yellow to brown liquid.

**Odour:** No specific odour.

**Odour threshold:** Not available.

**pH (1% aqueous dilution):** 6.4

**Melting point:** Not available.

**Freezing Point:** Not available.

**Boiling Point:** Not available.

**Flash Point:** Not available.

**Flammability:** Not flammable.

**Upper / lower explosion limits:** Not available.

**Vapour Pressure (mm Hg):** Not available.

**Relative Vapour Density:** Not available.

**Density / Relative density:** 1.100 ± 0.1 g/ml

**Solubility:** Active ingredient is soluble in water.

**n-octanol / water partition coefficient:** Not available.

**Auto-ignition temperature:** Not available.

**Decomposition temperature:** Not available.

**Viscosity:** Not available.

## 10. STABILITY AND REACTIVITY

**Chemical stability:** The product is stable for two (2) years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight.

**Reactivity:** None known.

**Possibility of hazardous reactions:** None known.

**Conditions to avoid:** Extreme heat or exposure to flames.

**Incompatible materials:** Refer to label.

**Hazardous decomposition products:** No hazardous decomposition products are known.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY:

Calculated according to GHS.

**Oral LD<sub>50</sub>** > 800 mg/kg (rat)

**Dermal LD<sub>50</sub>** > 4500 mg/kg (rat)

**Inhalation LC<sub>50</sub>** (4h) > 5 mg/l (rat)

**Skin Irritation:** Causes mild skin irritation.

**Eye Damage:** Causes serious eye damage.

**Skin Sensitization:** Product is not known to be a skin sensitizer.

**Respiratory Sensitization:** Product is not known to be a respiratory sensitizer.

**Reproductive cell mutagenicity:** Not available.

**Carcinogenicity:** Not available.

**Reproductive toxicity:** Not available.

**Specific target organ toxicity – single exposure:** Not available.

**Specific target organ toxicity – repeated exposure:** Not available.

**Aspiration hazard:** Not available.

**Chronic Effects:** Not available.

### POTENTIAL ADVERSE EFFECTS:

**Inhalation:** None known.

**Ingestion:** None known.

## 12. ECOLOGICAL INFORMATION

This product is not expected to be harmful to aquatic organisms.

### ECOTOXICITY DATA:

#### Metalaxyl-M / Mefenoxam TC

#### Fish:

LC<sub>50</sub> (96 h) Rainbow trout >100 mg/l

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<b>Daphnia:</b>		
LC <sub>50</sub> (48 h)		>100 mg/l
<b>Algae:</b>		
E <sub>r</sub> C <sub>50</sub> (72 h)	<i>Scenedesmus subspicatus</i>	103 mg/l
<b>Birds:</b>		
Acute oral LD <sub>50</sub> (14d)	Bobwhite quail	981-1419 mg/kg
Dietary LC <sub>50</sub> (8d)	Bobwhite quail	>5620 mg/kg diet
<b>Bees:</b>		
LD <sub>50</sub> contact (48h)		>100 microgram /bee
<b>Worms:</b>		
LC <sub>50</sub> (14d)	<i>Eisena fetida</i>	830 mg/kg soil

## ENVIRONMENTAL EFFECTS

Based on information for the active ingredient Metalaxyl-M / Mefenoxam TC.

**Plants:** Metabolised by more than four types of phase I reaction (oxidation of the phenyl ring, oxidation of the methyl group, cleavage of the methyl ester and N-dealkylation) to form major metabolites; at phase II, most of the metabolites are conjugated with sugar.

**Persistence and degradability:** In soil, DT<sub>50</sub> 21 d (ranges 5-30 d).

**Bio-accumulative potential:** Not determined.

**Mobility in soil:** K<sub>oc</sub> 45 ml/g (range 30 to 300 ml/g).

**Other adverse effects:** Not determined.

## 13. DISPOSAL CONSIDERATIONS

**Waste:** Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

**Container:** Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

## 14. TRANSPORT INFORMATION

**UN NUMBER:** Not regulated.

Not classed i.e. considered non-hazardous material according to UN Orange Book and international transport codes e.g. RID (rail) and IMDG (sea).

**Special / Environmental Precautions:** Wedge drums tightly to avoid movement.

**Transport in bulk:** Refer to MARPOL 73/78, Annex II and the IBC code.

## 15. REGULATORY INFORMATION

**Safety, health and environmental regulations / legislation for the mixture:**

OHSA 1993 Regulations for Hazardous Chemical Substances.

**Relevant information regarding restrictions:** None.

**EU regulation:** Regulation EC1272/2008 (EU-GHS/CLP)

**Other national regulations:** None.

**Chemical Safety Assessment carried out?** No

## 16. OTHER INFORMATION

**Packaging:** Packed in 10, 20, 50, 100, 150, 200, 250, 500, 750 millilitres and 2, 2.5, 5, 10, 50 and 100 litres plastic containers labelled according to South African regulations and guidelines.

**Other hazard statements:**

Please note that these hazard statements are specific to the active ingredient and/or inerts, but **do not** pertain to the formulation:

**H226:** Flammable liquid and vapour.

**H315:** Causes skin irritation.

**H412:** Harmful to aquatic life with long lasting effects.

**H413:** May cause long lasting harmful effects to aquatic life.

**Other abbreviations and explanations:**

**IATA:** International Air Transport Association.

**IBC:** International Bulk Chemical.

**ICAO:** International Civil Aviation Organization.

**IMDG:** International Maritime Dangerous Goods

**IMO:** International Maritime Organization.

**LD<sub>50</sub> value:** The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.

**OEL/RL:** Occupational exposure limit-recommended limit.

**TWA:** Time-weighted average – The average exposure over a specified period, usually a nominal eight hours.

**ST/STEL:** Short-term exposure limits.

**Disclaimer:** The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product

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nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

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### **END OF DOCUMENT**

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