Page 1 of 5



MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

UPL South Africa (Ptv) Ltd Tel: 031 514 5600 Co. Reg. No.: 2009/019713/07 Fax: 031 514 5611

7 Sunbury Office Park, Off Douglas Saunders Drive, La Lucia Ridge, South Africa, 4019

e-mail: msds@upl-ltd.com Web address: www.upl-ltd.com/za

Substance: Omethoate **Product Name: FOLIMAT 800 SL Product Use:** Insecticide **Creation Date:** June 2020 **Revision Date:** June 2023

24 Hr Emergency Number: In case of Poisoning:

Griffon Poison Information Centre: 082 4468946 Poisons Information Helpline: 0861 555 777

In case of Spillage:

Spill Tech: 086 100 0366 / 083 253 6618

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Common Name: Omethoate

Chemical Name: O,O-dimethyl S-methylcarbamoylmethyl phosphorothioate (IUPAC name)

CAS Nº.: [1113-02-6] Chemical family: Organophosphorus **Chemical formula:** $C_5H_{12}NO_4PS$

Mol. Weight: 213.2

Use: A soluble concentrate insecticide for the control of pests.

Formulation: Omethoate 800 g/Ł

Hazardous ingredients of toxicological concern:

Inert: concern: % present: 2-methoxy-1-methylethyl Irritant 32 %

Symbols: Indication of danger: Irritant

R20/22, R36/38, R50 Risk-phrase(s):

SECTION 3 - HAZARD IDENTIFICATION

Main hazard: Flammable.

Toxic if swallowed.

Harmful in contact with skin. Irritating to skin & eyes.

May cause sensitization by skin contact.

Flammability: Flash point 45°C

MATERIAL SAFETY DATA SHEET

Issued by: UPL South Africa (Pty) Ltd Phone: 031 514 5600

Griffon poison information centre: 082 4468946 Poisons information helpline: 0861 555 777

Page 2 of 5



MATERIAL SAFETY DATA SHEET

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS

Inhalation:

Move victim to fresh air. If breathing has stopped, perform artificial respiration and administer oxygen. Keep person warm and at rest. Obtain medical advice if necessary.

Skin contact:

Remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Seek medical attention if necessary.

Eve contact:

Immediately flush the contaminated eyes with gently flowing lukewarm water or saline solution for 20 minutes, holding the eyelid(s) open. Seek medical attention if necessary.

Ingestion:

Have victim rinse mouth thoroughly with water. Remove by gastric lavage or emesis, followed by saline cathartic. Give oxygen if respiration is depressed. Administration of gastric lavage or oxygen should be performed by qualified medical personnel. Seek medical advice.

Advice to physician:

See section 11 for information on toxicology.

The active ingredient listed in Section 2 belongs to the following chemical group: Organophosphate (ester of phosphoric acid).

Symptoms of poisoning:

Mild intoxication causes headache, blurred vision, weakness, sweating, mild chest pain, nausea and vomiting. Severe intoxication causes cyanosis, muscular twitching, spasms, miosis and respiratory paralysis.

Therapeutic measures: basic aid, decontamination, symptomatic treatment and if necessary administration of antidote.

Antidote: Atropine-sulphate, possibly in conjunction with Toxogonin or Obidoxime (PAM).

SECTION 5 - FIRE-FIGHTING MEASURES

Fire and explosion hazard:

Flash point: > 45 °C. This material is flammable.

Extinguishing agents:

Sprayed water jet, foam, extinguishing powder, CO2, sand. Contain water used for fire fighting for later disposal. In the event of fire, the formation of hydrogen cyanide, carbon monoxide, sulphur dioxide, nitrogen oxides and phosphorus pentoxide must be anticipated.

Firefighting:

Remove container from fire area if possible. Contain fire control water for later disposal. Use a recommended extinguishing agent for the type of surrounding fire. Avoid inhaling hazardous vapours. Keep material away from water sources and sewers. Do not touch material and avoid breathing fumes. Keep upwind.

Fire fighting protective equipment:

Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions:

Avoid contact with skin and eyes. Do not inhale fumes. For personal protection see Section 8. In view of the toxicity induced in experimental animals on repeated exposure, proper care should be taken during occupational use to avoid ingestion of spray particles, and to prevent accidental contamination of food products and water.

Environmental precautions:

Do not allow to enter drains or water courses. When the product contaminates public waters, inform appropriate authorities in accordance with local regulations.

Methods for cleaning up:

Small spills, soak up with sand or other suitable noncombustible absorbent material, such as sawdust, and place into containers for subsequent disposal.

Large spills contain liquid far ahead of spill. Contain spillage and contaminated water for subsequent disposal. Do not flush spilled material into drains. Keep spectators away.

MATERIAL SAFETY DATA SHEET

Issued by: UPL South Africa (Pty) Ltd Phone: 031 514 5600

Griffon poison information centre: 082 4468946 Poisons information helpline: 0861 555 777

Page 3 of 5



MATERIAL SAFETY DATA SHEET

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

Handling:

Handling: Harmful if swallowed. Avoid contact with eyes, prolonged contact with skin, and inhalation of fumes. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage:

Store in its original labelled container in a shaded, well-ventilated area, away from heat, sparks and other sources of ignition. Not to be stored next to foodstuffs and water supplies. Keep out of reach of children and animals. Local regulations should be complied with.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

Occupation exposure limits:

Avoid contact with product. Keep the working place clean and your working clothes separate. Remove soiled or soaked clothing immediately. Clean it separately taking suitable precautions or destroy if necessary. Wash hands between breaks. Take a shower or a bath at end of work.

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory system:

An approved respirator suitable for protection from dusts and mists of pesticides is adequate. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

Clothing:

Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Gloves:

Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

Eye protection:

Wear safety goggles or face shield.

Emergency eye wash: 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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light brown, clear liquid

Odour: Aromatic

pH: 2,8-3,8 at 1% in water

Flash point: >45°C
Auto flammability: None
Explosive properties: None
Oxidizing properties: None

Vapour pressure: 2,5 x 10-5 mmHg at 20°C (a.i.)

Density: 1,19 g/cm³ at 20°C

Solubility in water: Soluble

Solubility in other solvents: Readily soluble in alcohols, acetone, and many hydrocarbons

Solubility coefficient: $K_{ow} log P = -0.74 (20 °C; a.i.)$

MATERIAL SAFETY DATA SHEET

Issued by: UPL South Africa (Pty) Ltd Phone: 031 514 5600

Griffon poison information centre: 082 4468946 Poisons information helpline: 0861 555 777

Page 4 of 5



MATERIAL SAFETY DATA SHEET

SECTION 10 - STABILITY AND REACTIVITY

Storage stability:

Stable for up to 2 years under normal warehouse and field conditions. Avoid contact with strong acids, strong alkalis and alkaline materials such as lime. Avoid heat and sources of ignition.

Hazardous decomposition:

Product undergoes decomposition at 130°C.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity: LD50 oral, rat: 74 mg/kg (rat)

LD50 dermal, rat (male): 1037 mg/kg (a.i. applied to skin and not removed)

2074 mg/kg (a.i. removed after 4 hours)

Eye irritation: Slightly irritating (rabbit)* **Skin irritation:** Non-irritant (rabbit)*

Skin sensitization: Sensitization of the skin is possible in susceptible persons (a.i.)

Chronic toxicity: NOEL (3 m) for rats 4 mg/kg b.w. (a.i.)

NOEL (1 y) for dogs 0.025 mg/kg b.w. (a.i.)

* Data for Folimat 500 SL

SECTION 12 - ECOLOGICAL INFORMATION

Aquatic toxicity - fish: LC₅₀ (96 H) for golden orfe (leuciscus idus) 30 mg/l (a.i.)

LC₅₀ (96 H) for rainbow trout (oncorhynchus mykiss) 9.1 mg/l (a.i.)

Aquatic toxicity – daphnia: LC₅₀ (48 H) for water flea (daphnia magna) 0.022 mg/l (a.i.)

Aquatic toxicity – algae: ErC₅₀ for green algae (scenedesmus subspicatus) 167.5 mg/l (a.i.)

Biodegradability: Rapidly metabolised. In soil the half-life is a few days.

Bioaccumulation: No

Mobility: Mobile but rapidly metabolised.

SECTION 13 - DISPOSAL CONSIDERATION

Pesticide disposal:

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product that cannot be reused or reprocessed should be disposed of in a landfill approved for pesticide disposal. Do not contaminate rivers, dams or any other water sources with the product or used containers. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Comply with local legislation applying to waste disposal.

Package product wastes:

Emptied containers retain vapour and product residues. Observe all labelled safeguards. TRIPLE RINSE empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow to drain 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 minimum of 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the container.

Destroy the emptied containers by perforation and flattening. Do not re-use the empty container for any other purpose.

Comply with any local legislation applying to disposal.

SECTION 14 - TRANSPORT INFORMATION

UN NUMBER: 3017

Road Transport ADR/IRD:

MATERIAL SAFETY DATA SHEET

Issued by: UPL South Africa (Pty) Ltd Phone: 031 514 5600

Griffon poison information centre: 082 4468946 Poisons information helpline: 0861 555 777

Page 5 of 5



MATERIAL SAFETY DATA SHEET

Class: 6.1 Packing group: II

Shipping name: Organophosphorus pesticide, liquid, toxic, flammable, n.o.s. 67,5% omethoate / 1-methoxy-2-propylacetate.

Maritime Transport IMDG/IMO:

Class: 6.1 Packing group: II

Shipping name: Organophosphorus pesticide, liquid, toxic, flammable, n.o.s. 67,5% omethoate / 1-methoxy-2-propylacetate.

Considered a Marine Pollutant.

SECTION 15 - REGULATORY INFORMATION

Symbol: T Hazard description: Toxic.

Contains: 800 g/l omethoate

2-methoxy-1-methylethyl acetate:

MAK value: 50 ppm (275 mg/m³) (TRGS 900) Peak concentration limit according to Category I

Pregnancy group: C

German Technical Guideline Air (TA Luft) (3.1.7.): Class III Major incidents regulations of September 20, 1991: The preparation contains the following substances specifically referred to in Appendix II: 67,5 weight % omethoate (Appendix II No. 224). The preparation is also a "pesticide/agrochemical or active ingredient" thereof in accordance with Appendix III, Part 1 No. 21.

The preparation has the hazard characteristic / property "Toxic" in accordance with Appendix IV No. 4c (2)

VCI storage class: 3A

Risk phrases:

R10: Flammable.

R21: Harmful in contact with skin.

R25: Toxic if swallowed. R36: Irritating to eyes.

R43: May cause sensitization by skin contact.

Safety phrases:

S23: Do not breathe vapour.

\$28: After contact with skin, wash immediately with plenty of water and soap.

S36/37: Wear suitable protective clothing and gloves.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)

SECTION 16 - OTHER INFORMATION

Packaging and Labelling:

Packed in 5, 20 and 25 \(\ell \) fluorinated plastic containers and labelled according to South African regulations and guidelines.

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 use of the product. It is not applicable to unusual or non-standard uses of the product 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.

MATERIAL SAFETY DATA SHEET

Issued by: UPL South Africa (Pty) Ltd Phone: 031 514 5600

Griffon poison information centre: 082 4468946 Poisons information helpline: 0861 555 777