

Document no:434VVEffective date:October 2017Revision date (version):August 2022 (3)Product Code:FUNALYFOS800WDG/VV

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: ALYFOS 800 WDG

Other identifier: Fosetyl Aluminium 800 WDG

Recommended use: Fungicide Restrictions on use: Agriculture

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

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	H-statements				
	categories					
Health						
Dermal	Skin Irrit. 3	H316				
Eye	Eye Dam. 1	H318				

The most important adverse effects:

Physiochemical effects:

None known.

Human health effects:

Causes serious eye damage.

Label elements:



Signal word: Danger Hazard statements:

H316: Causes mild skin irritation. H318: Causes serious eye damage.

Precautionary statements:

P264+P265: Wash hands thoroughly after handling. Do not touch eyes.

not touch eyes.

P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

P305+P354+P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P317: If skin irritation occurs: get medical help.

Special labelling of certain mixtures:

None known.

Other hazards:
None known.

Toxicity:

Classification according to GHS: Category 5

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Composition:

Chemical Name	CAS	Conc. (m/m %)	Classification EC 1272/2008
Fosetyl Aluminium	39148- 24-8	81.14	Eye Dam. 1 (H318)
Sodium alkyl naphthalene sulfonate	26264- 58-4	< 5	Eye Irrit. 2 (H319)
Sodium lauryl sulfate	151-21-3	< 3	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)

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 and consult a doctor.

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

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 15-20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention from an ophthalmologist.

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: Causes serious eye damage and mild skin irritation and mild skin irritation.

Anticipated delayed effects: None calculated.

Most important symptoms/effects: Irritation of the mucous membrane and skin. Severe eye irritation to the extent where permanent damage can occur.



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Advice to physician: Treat symptomatically and supportively. No specific antidote known. Administer sodium sulphate and activated charcoal if more than a mouthful of the product has been ingested.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use carbon dioxide, dry chemical, water fog or alcohol-resistant foam.

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

Specific hazards: Hazard products arising from combustion: Oxides of Phosphorus, Nitrogen oxides and carbon monoxide.

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. Keep upwind. 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

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

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with eyes and skin. Do not breathe in spray dust or mist. 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. This product is classified to be very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water/Environmental Affairs. **Methods and Materials for Containment:** Contain spilled product.

Methods and Materials for Clean-up: Contain spilled product by picking up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal. Do not create a powder cloud by using a brush or compressed air. 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. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. Collect washings and add to the drums already collected. Do not flush spilled material or washings into

drains or waterways. See section 13 for disposal considerations.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: 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 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 bags or containers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration

Components	Exposure limits	Type of exposure limit	Source
Kaolin (Total dust)	10 mg/m3	Up to 10- hour TWA	NIOSH REL

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: For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved airpurifying respirator.



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

Eye Protection: The use of chemical safety (impervious) goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

Skin and Body Protection: Employee must wear appropriate protective (impervious) clothing; (rubber) boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

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: Dry, free flowing, essentially non-dusty water dispersible granule. Free from visible extraneous matter and hard lumps. Colour: Off-white.

Odour: Negligible.

pH (1% emulsion in pure water): $4.0 @ 20 \pm 2 ^{\circ}$ C.

Melting point: Not available. Freezing Point: Not available. Boiling Point: Not available.

Flash Point: Not applicable to solids.

Flammability: Not flammable.

Upper/lower explosion limits: Not applicable to solids.

Vapour Pressure (mm Hg): Not available. Relative Vapour Density: Not available.

Density: 1.59 g/m ℓ @ 20 ± 2 °C.

Solubility: Dispersible.

n-octanol/water partition coefficient: Not available.

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

Viscosity: Not applicable to solids.

10. STABILITY AND REACTIVITY

Chemical Stability: The product is stable for two 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: Will not occur. Conditions to Avoid: Extreme heat or exposure to flames Incompatible Materials: Strong oxidizers, strong bases, strong reducing agents.

Hazardous Decomposition Products: Not expected under conditions of use specified on the label.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS:

Oral LD₅₀ > 2381 mg/kg

Dermal LD₅₀ > 2465 mg/kg **Inhalation LC**₅₀ > 53 mg/l

Skin Irritation: Cause mild skin irritation.

Eve Damage/Irritation: Causes serious eye damage.

Skin Sensitization: Not calculated.

Respiratory Sensitization: Not calculated.

Reproductive cell mutagenicity: Not calculated.

Carcinogenicity: Not calculated.

Reproductive toxicity: Not calculated.

Specific target organ toxicity - single exposure: Not

calculated.

Specific target organ toxicity - repeated exposure: Not

calculated.

Aspiration hazard: Not calculated.

Chronic Effects (other targets e.g. developmental): Not

calculated.

POTENTIAL ADVERSE EFFECTS:

Inhalation: Not calculated.
Skin contact: Not calculated.
Eye contact: Not calculated.
Ingestion: Not calculated.

12. ECOLOGICAL INFORMATION

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

ECOTOXICITY DATA: For the active ingredient – fosetylaluminium.

Fish:

 LC_{50} (96 h) Rainbow trout > 122 mg/ ℓ . Bluegill sunfish Carp > 60 mg/ ℓ .

> 100 mg/ℓ.

9.54 mg/ℓ.

43.3 mg/ℓ.

<u>Daphnia:</u>

 LC_{50} (48 h) > 100 mg/ ℓ .

Algae:

EC₅₀ (90 h) Scenedesmus >36 mg/ ℓ .

Pseudokirchneriella

subcapitata

Desmodesmus

subspicatus Navicula

Navicula

pelliculosa

<u>Birds:</u> Bobwhite quail > 2000 mg/kg. Acute oral LD₅₀ Bobwhite quail

Dietary LC₅₀ (5 Mallard ducks > 20000 ppm d) diet.

Bees:

 LD_{50} contact > 1000 mg/bee. LD_{50} oral > 462 mg/bee.

Worms:

 $\overline{\text{LC}}_{50}$ (14 d) > 1000 mg/kg soil.

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Plants: The metabolism of Fosetyl-aluminium in plants proceeds through the hydrolytic cleavage of the ethyl ester bond. Phosphorous acid is detected as the major metabolite.

ENVIRONMENTAL EFFECTS:

Persistence and degradability: In soil, fosetyl-aluminium has an extremely short half-life under both aerobic and anaerobic conditions, with rapid dissipation and metabolism; DT_{50} (aerobic) 20 min to 1.5 h. In microbially active water/sediment systems, fosetyl-aluminium is rapidly degraded; DT_{50} 14-40 h.

Bio-accumulative Potential: Not determined.

Mobility in soil: Not determined.

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:

TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Invert the empty container over the spray or mixing tank. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler www.croplife.co.za. Do not bury, burn, or donate the container to any other parties that may use it as a container for food or beverages.

CLEAN THE EMPTY PLASTIC BAG AS FOLLOWS: Turn the bag inside out. Hold the bag over the spray or mixing tank and rinse the bag with running water for thirty seconds. Shake the rinsate off into the tank. Repeat the rinsing twice. Cut the bag into pieces and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn of donate the bag to any other parties that may use it as container for foodstuffs.

14. TRANSPORT INFORMATION

UN Number: Not regulated.

Marine Pollutant (Y/N): N

Special/Environmental Precautions: None known.

Transport in bulk (according to MARPOL 73/78, Annex II and the IBC code): Not available.

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 1, 5, 10, 20 and 25 kg plastic bags/containers, labelled according to South African regulations and guidelines.

Additional H statements (formulants):

H302: Harmful if swallowed. **H315:** Causes skin irritation.

H319: Causes serious eye irritation.

H412: Harmful to aquatic life with long lasting effects.

IATA: International Air Transport Association.

IBC: International Bulk Chemical.

ICAO: International Civil Aviation Organization. **IMDG:** International Maritime Dangerous Goods

IMO: International Maritime Organization.

LD₅₀ **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 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.

END OF DOCUMENT

Compiled: October 2017 **Reviewed:** August 2022

Revision no.: (3)

Next revision date: August 2027

For detailed information on revisions, contact the Registration holder.