



深圳恒宇丰生物科技有限公司 SHEN ZHEN YUFULL INDUSTRIES CO., LTD.

Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: Fosetyl-aluminium 80% WP

Product Class: Fungicide

Chemical Name: aluminium tris-O-ethylphosphonate

Chemical Formulation: $C_6H_{18}AlO_9P_3$

Formulation: Wettable powder(WP)

Supplier: Shenzhen Yufull Industries Co., Ltd

Add: Room 1311, Bldg A, Liu Jin Square, No3038, Bao'an North Road, Sungang Street, Luohu District, Shenzhen, China.

Tel: 0086-755-25840455

Fax: 0086-755-25867996

Website: <http://www.yufull.com>

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification in accordance with Australian GHS Regulation

Serious eye damage/eye irritation: Category 2A

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands thoroughly after handling.

P280 Wear eye protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Formulation Composition	CAS-number	Content (%)
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Fosetyl-aluminium	39148-24-8	80%
Others		Up to 100%

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth. Refer for medical attention. Consult a physician.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Use foam, dry powder or carbon dioxide.

Fire fighting procedures: Contain the spread of the fire-fighting media. Dike area to prevent runoff and contamination of water sources. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Equipment or materials involved in pesticide fire may become contaminated. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Unusual fire/explosion hazards: This product, when mixed with air in critical concentrations and in the presence of an ignition source, may present a dust explosion hazard.

6. ACCIDENTAL RELEASE MEASURES

Spill or leak procedures

Clean up spills immediately observing the precautions in Section 8 of this MSDS. Isolate the hazard area



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and keep unnecessary and unprotected personnel from entering. Prevent material from contaminating soil or from entering sewage and drainage systems and bodies of water. Avoid dust formation and avoid breathing dust. Use recommended protective equipment and carefully sweep up spilled material, placing it in a covered container for reuse or disposal. Scrub the contaminated area with soap and water followed by a water rinse. Use dry absorbent material to absorb and collect wash solution for proper disposal.

7. HANDLING AND STORAGE

Do not contaminate water, food, or feed by storage or disposal.

Handling:

Handle and open container in a manner as to prevent spillage. Avoid dust production. Do not breathe dust.

Avoid contact with skin and eyes.

Storage:

Store in original container and keep tightly closed. Store in a cool dry place. Keep out of reach of children.

Keep away from food, drink and animal feedstuffs.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

FOR THE MANUFACTURE, FORMULATION, AND PACKAGING OF THE PRODUCT.

- Long-sleeved shirt and long pants.
- Waterproof gloves, shoes plus socks.
- Protective eyewear.

Additional protective measures

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User safety recommendations

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean



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clothing.

- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Engineering controls

Use adequate ventilation to minimize airborne concentrations of this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White powder

Odour: No characteristic odour

pH value (1% Sol): 3.0-5.0

Molecular Weight: 354.1

M. p. 215 °C

Kow logP = -2.1 to -2.7 (23 °C)

Solubility In water 111.3 g/L (pH 6, 20 °C).

In methanol 807, acetone 6, ethyl acetate <1 (all in mg/L, 20 °C).

Stability Hydrolysis of fosetyl-aluminium occurs under extreme acid or alkaline conditions. DT50 5 d (pH 3), 13.4 d (pH 13). Decomposes above 276 °C. Photostability DT50 23 daylight hours. pKa 4.7 (20 °C)

10. STABILITY AND REACTIVITY

Conditions to avoid: Extremely humidity

Stability: Stable under normal conditions.

Incompatibility: Strong acids and strong bases

Hazardous decomposition products: Thermal decomposition emits toxic fumes: carbon dioxide, carbon monoxide, AlOx, POx.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD50: (Rat) for male and female > 5000 mg/kg;



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Acute Dermal LD50: (Rat) for male and female > 5000 mg/kg;

Inhalation LC50 (4h): (Rat) for male and female > 5.02 mg/L;

Eye Irritation: Mild irritant;

Skin Irritating: No skin irritation;

Sensitisation: Not a dermal sensitiser.

Germ cell mutagenicity: No data available.

Carcinogenicity: Fosetyl-aluminium was not carcinogenic in lifetime feeding studies in rats and mice.

Reproductive toxicity: Fosetyl-aluminium did not cause reproductive toxicity in a two-generation study in rats.

Specific target organ toxicity-single exposure: No data available.

Specific target organ toxicity-repeated exposure: Fosetyl-aluminium did not cause specific target organ toxicity in experimental animal studies.

12. ECOLOGICAL INFORMATION

Birds: Acute oral LD50 for bobwhite quail > 8000 mg/kg ;

Fish: LC50 (96 h) for rainbow trout > 122 mg/L ;

Bees: LD50 (96h)(oral and contact) > 100 µg/bee;

Algae: EC50 (90h) for *Scenedesmus pannonicus* > 21.9 mg/L;

Daphnia: LC50 (48h) for *Daphnia magna* > 100 mg/L;

Worms: LC50 (14 d) for earthworms > 1000 mg/kg soil.

13. DISPOSAL CONSIDERATION

Pesticide disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal: Dispose of product containers, waste containers, and residues according to label



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instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

Proper Shipping Name: Environmentally hazardous substance, solid, N.O.S.

Hazard Class: 9

UN No.: UN 3077

Marine Pollutant: Yes

Packing Group: III

15. REGULATORY INFORMATION

Hazard symbols: N Dangerous for the environment

Risk phrases:

R23 Toxic by inhalation.

R25 Toxic if swallowed.

R48 Danger of serious damage to health by prolonged exposure.

R53 May cause long-term adverse effects in the aquatic environment.

Safety phrases:

S2 Keep out of the reach of children.

S7 Keep container tightly closed.

S9 Keep container in a well-ventilated place.

S36 Wear suitable protective clothing.

S39 Wear eye/face protection.

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

16. OTHER INFORMATION

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider



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the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact the company.

END OF MSDS