



Material Safety Data Sheet
ALIETTE® WDG BRAND FUNGICIDE

MSDS Number: 102000004006
 MSDS Version 2.0
 Revision Date: 08/23/2005

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name ALIETTE® WDG BRAND FUNGICIDE
MSDS Number 102000004006
EPA Registration No. 432-890
Product Use FUNGICIDE

Bayer Environmental Science
 2 T.W. Alexander Drive
 Research Triangle PK, NC 27709
 USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call 1-800-334-7577 (24 hours/day)
 For Product Information call 1-800-331-2867

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Fosetyl Aluminium	39148-24-8	80.00
Quartz (Silica, Crystalline)	14808-60-7	0.25

SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview Caution! Harmful if inhaled or absorbed through skin. Causes skin irritation.

Physical State dry free flowable granules

Odor product specific

Appearance brown

Immediate Effects

Eye Causes irritation, redness.

Skin Harmful if absorbed through skin. Irritant. Causes redness, swelling.

Ingestion Harmful if swallowed.

Inhalation Harmful if inhaled. May cause upper respiratory tract irritation.



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Chronic or Delayed Long-Term

This product is not listed as a carcinogen by ACGIH, NTP, IARC or OSHA. However, it may contain crystalline silica (quartz), a substance which has been listed as a carcinogen by ACGIH, NTP and IARC. Crystalline silica is a naturally-occurring mineral component of many sands and clays. Although the carcinogenic potential of crystalline silica in humans is controversial, it must be considered if it is inhaled under excessive exposure conditions. The respirable portion of the silica that may be contained in this product, however, is small, such that inhalation exposure during anticipated conditions of use is minimal.

Medical Conditions Aggravated by Exposure

No specific medical conditions are known which may be aggravated by exposure to this product. As with all materials which can cause upper respiratory tract irritation, persons with a history of asthma, emphysema, or hyperreactive airways disease may be more susceptible to overexposure. Pulmonary and respiratory diseases may be aggravated by exposure to respirable crystalline silica. Skin contact may aggravate existing skin disease.

SECTION 4. FIRST AID MEASURES

General	Have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin	Take off all contaminated clothing immediately. Rinse immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Notes to Physician Signs and Symptoms	The following symptoms may occur: eye and mucous membrane irritation May cause skin and eye irritation.
Treatment	There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.



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SECTION 5. FIRE FIGHTING MEASURES

Flash Point	not applicable
Autoignition Temperature	no data available
Fire and Explosion Hazards	This product, when mixed with air in critical proportions and in the presence of an ignition source, may present a dust explosion hazard. Under fire conditions, toxic, corrosive fumes are emitted.
Suitable Extinguishing Media	foam, dry powder, carbon dioxide (CO ₂)
Fire Fighting Instructions	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 fires may become contaminated. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Methods for Cleaning Up	Clean up promptly by sweeping or vacuum. Pick up and transfer to properly labelled containers.
Additional Advice	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

Handling Procedures	Smoking, eating, drinking and the application of cosmetics should be prohibited in the application area.
Storing Procedures	Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.
Work/Hygienic Procedures	Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. When in contact with the skin, clean with soap and water. Remove clothing immediately if pesticide gets inside. Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE). Keep and wash PPE separately from other laundry.



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Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your local and regional regulatory agencies, consult the agency responsible for pesticide regulation.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Engineering Controls Provide appropriate exhaust ventilation at places where dust is formed.

Eye/Face Protection Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices.

Safety glasses with side-shields
goggles
or
face-shield

Body Protection Applicators and other handlers must wear:
Long-sleeved shirt and long pants
Waterproof gloves
Shoes plus socks

Consideration must be given both to durability as well as permeation resistance.

Respiratory Protection When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or Industry recommendations.

Under normal conditions, in the absence of other airborne contaminants, the following should provide protection from this material up to the conditions specified by the appropriate OSHA, WHMIS or ANSI standard(s):
Air-purifying (half-mask/full-face) respirator with cartridge/canister approved for use against dusts, mists and fumes, pesticides.

Under conditions immediately dangerous to life or health, or emergency conditions with unknown concentrations, use a full-face positive pressure air-supplied respirator equipped with an emergency escape air supply unit or use a self-contained breathing apparatus unit.

Exposure Limits				
Fosetyl Aluminium	39148-24-8	ACGIH	TWA	2 mg/m3



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Quartz (Silica, Crystalline)	14808-60-7	Expressed as	as AI	
		NIOSH REL		2 mg/m3
		Expressed as	as AI	
		OSHA Z1A TWA		2 mg/m3
		Expressed as	as AI	
		US CA OEL TWA PEL		2 mg/m3
		ACGIH TWA		0.05 mg/m3
		Form of Exposure	Respirable fraction.	
		ACGIH NIC TWA		0.025 mg/m3
		Form of Exposure	Respirable fraction.	
NIOSH REL		0.05 mg/m3		
Form of Exposure	Respirable dust.			
OSHA Z1A TWA		0.1 mg/m3		
Form of Exposure	Respirable dust.			
Z3 TWA		2.4 millions of particles per cubic foot of air		
Form of Exposure	Respirable.			
Remarks	The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.			
Z3 TWA		0.1 mg/m3		
Form of Exposure	Respirable.			
Remarks	The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.			
Z3 TWA		0.3 mg/m3		
Form of Exposure	Total dust.			
Remarks	The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.			
US CA OEL TWA PEL		0.1 mg/m3		
Form of Exposure	Respirable dust.			
US CA OEL TWA PEL		0.3 mg/m3		
Form of Exposure	Total dust.			
OSHA Z1 PEL		5 mg/m3		
Form of Exposure	Respirable fraction.			
OSHA Z1 PEL		15 mg/m3		



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Form of Exposure

Total dust.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	brown
Physical State	dry free flowable granules
Odor	product specific
pH	3.5 - 4.0 (1.0 %) at 23 °C
Water Solubility	dispersible
Partition Coefficient (n-octanol/water)	logPow: -2.1 The value mentioned relates to the active ingredient fosetyl aluminium.

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Conditions to Avoid	extreme humidity
Incompatibility	strong acids strong bases strong oxidizing agents strong reducing agents
Hazardous Decomposition Products	Thermal decomposition oxides of phosphorus carbon dioxide (CO ₂) Carbon monoxide phosphine gas
Hazardous Reactions	No hazardous reactions when stored and handled according to prescribed instructions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	rat: LD50: 2,860 mg/kg
Acute Dermal Toxicity	rabbit: LD50: > 2,000 mg/kg
Acute Inhalation Toxicity	rat: LC50: > 5 mg/l Exposure time: 4 h
Skin Irritation	rabbit: slight irritation



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Eye Irritation rabbit: Mild eye irritation
Sensitization guinea pig: Non-sensitizing

Assessment Carcinogenicity

ACGIH

Quartz (Silica, Crystalline) 14808-60-7 Group A2

NTP

Quartz (Silica, Crystalline) 14808-60-7

IARC

Quartz (Silica, Crystalline) 14808-60-7 Overall evaluation: 1

OSHA

None.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

This product is toxic to aquatic and estuarine invertebrates. Drift and runoff from treated areas may be hazardous to fish/aquatic organisms in adjacent sites. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark outside of a treated rice field. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Follow container label instructions for disposal of wastes generated during use in compliance with the product label. Dispose of product containers, waste containers and residues according to local, state and federal health and environmental regulations.

Container Disposal

Empty remaining contents. Triple rinse containers. Rinsed packaging may be acceptable for landfill, otherwise incineration will be required in accordance with local regulations. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

TRANSPORTATION CLASSIFICATION:
Not regulated for transportation by any mode

FREIGHT CLASSIFICATION:
Insecticides or Fungicides N.O.I., other than poison

SECTION 15. REGULATORY INFORMATION



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US Federal Regulations

TSCA list

Quartz (Silica, Crystalline) 14808-60-7

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Quartz (Silica, Crystalline) 14808-60-7

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Fosetyl Aluminium	39148-24-8	CA, IL, MN
Quartz (Silica, Crystalline)	14808-60-7	IL, MA, MN, RI

Canadian Regulations

Canadian Domestic Substance List

Quartz (Silica, Crystalline) 14808-60-7

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

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SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 0 Reactivity - 0 Others - none

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: Renumbered due to new system; revised hazardous components.



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