## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

**Trade name** ALIETTE WG

**Product code (UVP)** 79892411, 81013152

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Use** Fungicide

**EPA-Nr.** HSR000483

### 1.3 Details of the supplier of the safety data sheet

**Supplier** Bayer New Zealand Limited
3 Argus Place, Hillcrest
Auckland 0627
New Zealand

**Telephone** 0800 428 246

**Telefax** (09) 441 8645

### 1.4 Emergency telephone no.

**Emergency Number** 0800 734 607 (24hr)

**Global Incident Response Hotline (24h)** +1 (760) 476-3964 (Company 3E for Bayer AG, Crop Science Division)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classified as hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001**

6.1E
H303 May be harmful if swallowed.

6.3B
H316 Causes mild skin irritation.

8.3A
H318 Causes serious eye damage.

9.1C
H412 Harmful to aquatic life with long lasting effects.

### 2.2 Label elements

**Labelling in accordance with Hazardous Substances Identification Regulations 2001**

Hazard label for supply/use required.

**Signal word**: Danger

**Hazard statements**

| | |
|---|---|
| H303 | May be harmful if swallowed. |
| H316 | Causes mild skin irritation. |
| H318 | Causes serious eye damage. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Precautionary statements**

| | |
|---|---|
| P102 | Keep out of reach of children. |
| P308 + P311 | IF exposed or concerned: Call a POISON CENTER/ doctor/ physician. |
| P501 | Dispose of contents/container in accordance with local regulation. |

**2.3 Other hazards**

No other hazards known.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.2 Mixtures**

**Chemical nature**

Water dispersible granules (WG)
Fosetyl aluminium 80%

**Hazardous components**

| Name | CAS-No. | Conc. [%] |
|---|---|---|
| Fosetyl-Aluminium | 39148-24-8 | 80.00 |
| Ethoxylated-propoxylate fatty alcohol (block copolymer) | 68154-97-2 | > 1.0 – < 25.0 |
| Lignosulfonic acid, sodium salt, sulfomethylated | 68512-34-5 | > 3.0 – < 10.0 |
| Sodium hydroxide | 1310-73-2 | > 1.0 – < 5.0 |

## SECTION 4: FIRST AID MEASURES

**4.1 Description of first aid measures**

| | |
|---|---|
| **General advice** | Move out of dangerous area. Remove contaminated clothing immediately and dispose of safely. When symptoms develop and persist, seek medical advice. |
| **Inhalation** | Move to fresh air. |
| **Skin contact** | Wash off immediately with soap and plenty of water. |
| **Eye contact** | Wash off immediately with plenty of water for at least 15 minutes. Eye treatment by an ophthalmologist. |

**Ingestion** Do NOT induce vomiting. Call a physician or poison control center immediately. Keep patient warm and at rest.

**4.2 Most important symptoms and effects, both acute and delayed**

**Symptoms** Skin, eye and mucous membrane irritation

**4.3 Indication of any immediate medical attention and special treatment needed**

**Treatment** Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. There is no specific antidote. Treat symptomatically.

Contact the National Poisons and Hazardous Chemicals Information center in Dunedin, PO Box 913, Dunedin. Phone 0800 POISON (0800 764 766).

## SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable** High volume water jet

**5.2 Special hazards arising from the substance or mixture** In the event of fire the following may be released:, Carbon monoxide (CO), Nitrogen oxides (NOx), Oxides of phosphorus

**5.3 Advice for firefighters**

**Special protective equipment for firefighters** In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

**Further information** Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**

**Precautions** Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke.

**6.2 Environmental precautions** Do not allow to get into surface water, drains and ground water.

**6.3 Methods and materials for containment and cleaning up**

**Methods for cleaning up** Use approved industrial vacuum cleaner for removal. Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

| | |
|---|---|
| **Additional advice** | Check also for any local site procedures. |
| **6.4 Reference to other sections** | Information regarding safe handling, see section 7.<br>Information regarding personal protective equipment, see section 8.<br>Information regarding waste disposal, see section 13. |

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

| | |
|---|---|
| **Advice on safe handling** | Use only in area provided with appropriate exhaust ventilation. |
| **Advice on protection against fire and explosion** | No special precautions required. |
| **Hygiene measures** | Remove soiled clothing immediately and clean thoroughly before using again. Wash hands immediately after work, if necessary take a shower. Smoking, eating and drinking should be prohibited in the application area. |

### 7.2 Conditions for safe storage, including any incompatibilities

| | |
|---|---|
| **Requirements for storage areas and containers** | Store in a place accessible by authorized persons only. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. |
| **Advice on common storage** | Keep away from food, drink and animal feedingstuffs. |
| **Suitable materials** | Aluminium composite film (min. 0,007 mm Aluminium) |
| **7.3 Specific end use(s)** | Refer to the label and/or leaflet. |

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|---|---|---|---|---|
| Fosetyl-Aluminium | 39148-24-8 | 5 mg/m3 (TWA) | | OES BCS* |
| Sodium hydroxide | 1310-73-2 | 2 mg/m3 (CEILING) | 07 2011 | NZ OEL |
| Sodium hydroxide | 1310-73-2 | 2 mg/m3 (TLV) | | OES BCS* |
| Synthetic amorphous silica | 112926-00-8 | 10 mg/m3 (TWA) | 06 2016 | NZ OEL |

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

### 8.2 Exposure controls

**Personal protective equipment**
In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**Respiratory protection** Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent.
Respiratory protection should only be used to control residual risk of

short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

**Hand protection**

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

| | |
|---|---|
| Material | Nitrile rubber |
| Rate of permeability | > 480 min |
| Glove thickness | > 0.4 mm |
| Protective index | Class 6 |
| Directive | Protective gloves complying with EN 374. |

**Eye protection**

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

**Skin and body protection**

Wear standard coveralls and Category 3 Type 5 suit.
If there is a risk of significant exposure, consider a higher protective type suit.
Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Form** | water-dispersible granules |
| **Colour** | brown |
| **Odour** | weak, characteristic |
| **pH** | 3.0 - 4.5 at 1 % (23 °C) (CIPAC D water (342ppm)) |
| **Bulk density** | 0.620 - 0.660 g/ml (loose) |
| **Water solubility** | dispersible |
| **Partition coefficient: n-octanol/water** | Fosetyl Aluminium: log Pow: -2.1 |
| **Oxidizing properties** | No oxidizing properties |
| **Explosivity** | Not explosive |
| **9.2 Other information** | Further safety related physical-chemical data are not known. |

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity**

| | |
|---|---|
| **Thermal decomposition** | Stable under normal conditions. |
| **10.2 Chemical stability** | Stable under recommended storage conditions. |
| **10.3 Possibility of hazardous reactions** | No hazardous reactions when stored and handled according to prescribed instructions. |
| **10.4 Conditions to avoid** | Extremes of temperature and direct sunlight. |
| **10.5 Incompatible materials** | Store only in the original container. |
| **10.6 Hazardous decomposition products** | No decomposition products expected under normal conditions of use. |

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

| | |
|---|---|
| **Acute oral toxicity** | LD50 (Rat) > 2,000 mg/kg |
| **Acute dermal toxicity** | LD50 (Rat) > 2,000 mg/kg |
| **Skin irritation** | Slight irritant effect - does not require labelling. (Rabbit) |
| **Eye irritation** | Irritating to eyes. (Rabbit) |
| **Sensitisation** | Non-sensitizing. (Guinea pig)<br>OECD Test Guideline 406, Buehler test |

**Assessment STOT Specific target organ toxicity – single exposure**

Fosetyl Aluminium: Based on available data, the classification criteria are not met.

**Assessment STOT Specific target organ toxicity – repeated exposure**

Fosetyl Aluminium did not cause specific target organ toxicity in experimental animal studies.

**Assessment mutagenicity**

Fosetyl Aluminium was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment carcinogenicity**

Fosetyl Aluminium was not carcinogenic in lifetime feeding studies in rats and mice.

**Assessment toxicity to reproduction**

Fosetyl Aluminium did not cause reproductive toxicity in a two-generation study in rats.

**Assessment developmental toxicity**

Fosetyl Aluminium did not cause developmental toxicity in rats and rabbits.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1 Toxicity**

| | |
|---|---|
| **Toxicity to fish** | LC50 (Oncorhynchus mykiss (rainbow trout)) > 120 mg/l<br>Exposure time: 96 h |
| **Toxicity to aquatic invertebrates** | EC50 (Daphnia magna (Water flea)) 37 mg/l<br>Exposure time: 48 h |
| **Toxicity to aquatic plants** | EC50 (Desmodesmus subspicatus (green algae)) 27.7 mg/l<br>Growth rate; Exposure time: 72 h |

**12.2 Persistence and degradability**

| | |
|---|---|
| **Biodegradability** | Fosetyl Aluminium:<br>rapidly biodegradable |
| **Koc** | Fosetyl Aluminium: Koc: 0.1 |

**12.3 Bioaccumulative potential**

| | |
|---|---|
| **Bioaccumulation** | Fosetyl Aluminium:<br>Does not bioaccumulate. |

**12.4 Mobility in soil**

| | |
|---|---|
| **Mobility in soil** | Fosetyl Aluminium: Highly mobile in soils |

**12.5 Results of PBT and vPvB assessment**

| | |
|---|---|
| **PBT and vPvB assessment** | Fosetyl Aluminium: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB). |

**12.6 Other adverse effects**

| | |
|---|---|
| **Additional ecological information** | No other effects to be mentioned. |

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

| | |
|---|---|
| **Product** | Dispose of this product only by using according to the label, or at an approved landfill or other approved facility. |
| **Contaminated packaging** | Triple rinse containers. Recycle if possible. If allowed under local authority, burn if circumstances, especially wind direction permit, otherwise crush and bury in an approved local authority facility. Do not use container for any other purpose. |

## SECTION 14: TRANSPORT INFORMATION

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.
**According to ADN/ADR/RID/IMDG/IATA not classified as dangerous goods.**

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

**14.1 – 14.5** Not applicable.
**14.6 Special precautions for user**
See sections 6 to 8 of this Safety Data Sheet.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**
No transport in bulk according to the IBC Code.

## SECTION 15: REGULATORY INFORMATION

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Further information**

| | |
|---|---|
| HSNO approval-Nr. | HSR000483 |
| HSNO Controls | See www.epa.govt.nz |
| ACVM Reg. | P2984 |
| ACVM Condition | See www.foodsafety.govt.nz |

## SECTION 16: OTHER INFORMATION

**Abbreviations and acronyms**

| | |
|---|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute toxicity estimate |
| CAS-Nr. | Chemical Abstracts Service number |
| Conc. | Concentration |
| ECx | Effective concentration to x % |
| EINECS | European inventory of existing commercial substances |
| ELINCS | European list of notified chemical substances |
| EN | European Standard |
| EU | European Union |
| IATA | International Air Transport Association |
| IBC | International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) |
| ICx | Inhibition concentration to x % |
| IMDG | International Maritime Dangerous Goods |
| LCx | Lethal concentration to x % |
| LDx | Lethal dose to x % |
| LOEC/LOEL | Lowest observed effect concentration/level |
| MARPOL | MARPOL: International Convention for the prevention of marine pollution from ships |
| N.O.S. | Not otherwise specified |
| NOEC/NOEL | No observed effect concentration/level |
| OECD | Organization for Economic Co-operation and Development |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |

| | |
|---|---|
| TWA | Time weighted average |
| UN | United Nations |
| WHO | World health organisation |

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance of the product.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.