

ALIETTE®

 Version 3.0 / USA
 Revision Date: 04/13/2020

 102000019662
 Print Date: 04/13/2020

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

Product identifier

Trade name ALIETTE®

Product code (UVP) 79386508, 80910347

SDS Number 102000019662

EPA Registration No. 432-890

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

Use Fungicide

Restrictions on useSee product label for restrictions.

Information on supplier

Supplier Bayer Environmental Science

A division of Bayer CropScience LP 500 Centregreen Way, Suite 400

Cary, NC 27513

USA

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number

1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified. No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS



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| Hazardous Component Name | CAS-No. | Concentration % by weight |
|--|------------|---------------------------|
| Fosetyl-Aluminium | 39148-24-8 | 80.0 |
| Nonylphenol ethoxylate, branched Lignosulfonic acid, sodium salt, sulfomethylated | 68412-54-4 | 5.2 |
| Lignosulfonic acid, sodium salt, sulfomethylated | 68512-34-5 | 4.4 |
| Nonylphenol ethoxylate | 68412-54-4 | 1.0 |

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice When possible, have the product container or label with you when

calling a poison control center or doctor or going for treatment.

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 physician or poison control center immediately.

Skin contact Take off contaminated clothing and shoes immediately. Wash off

immediately with plenty of water for at least 15 minutes. Call a

physician or poison control center immediately.

Eye contact 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 physician or poison control center

immediately.

Ingestion Call a physician or poison control center immediately. Rinse out mouth

and give water in small sips to drink. 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. Do not leave victim

unattended.

Most important symptoms and effects, both acute and delayed

Symptoms The following symptoms may occur:, The product causes irritation of

eyes, skin and mucous membranes.

Indication of any immediate medical attention and special treatment needed

Treatment Appropriate supportive and symptomatic treatment as indicated by the

patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Foam, Dry powder, Carbon dioxide (CO2)

Unsuitable High volume water jet



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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

Advice for firefighters

Special protective equipment for firefighters

Firefighters should wear NIOSH approved self-contained breathing

apparatus and full protective clothing.

In the event of fire and/or explosion do not breathe fumes. Wear self-

contained breathing apparatus and protective suit.

Further information Keep out of smoke. Fight fire from upwind position. Do not allow run-off

from fire fighting to enter drains or water courses. Contain the spread

of the fire-fighting media.

Flash point Not applicable

Auto-ignition temperatureNo data availableLower explosion limitNot applicableUpper explosion limitNot applicableExplosivityNo data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact

with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Avoid dust formation. Sweep up or vacuum up spillage and collect in

suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations. Decontaminate tools

and equipment following cleanup.

Additional advice Use personal protective equipment. If the product is accidentally

spilled, do not allow to enter soil, waterways or waste water canal.

Reference to other sections 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

Precautions for safe handling

Advice on safe handlingUse only in area provided with appropriate exhaust ventilation. Handle

and open container in a manner as to prevent spillage.



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Hygiene measures Wash hands thoroughly with soap and water after handling and before

eating, drinking, chewing gum, using tobacco, using the toilet or

applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before

using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children,

preferably in a locked storage area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|------------------------|------------|--------------------|---------|----------|
| Fosetyl-Aluminium | 39148-24-8 | 1 mg/m3 (TWA) | 02 2012 | ACGIH |
| (Respirable fraction.) | | , , | | |
| Fosetyl-Aluminium | 39148-24-8 | 5 mg/m3 (TWA) | | OES BCS* |

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

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 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.

Hand protection Chemical resistant nitrile rubber gloves

Eye protection Safety glasses with side-shields

Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures Follow manufacturer's instructions for cleaning/maintaining PPE. If

no such instructions for washables, use detergent and warm/tepid

water.

Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES



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Appearance grey to tan

Physical State dry, free flowing granules

Odor characteristic

Odour Threshold No data available

pH 3.0 - 4.0 (5.0 %)

Viscosity, kinematic No data available

Vapor Pressure Not applicable

Vapor Density (Air = 1) Not applicable

Density No data available

Bulk density 0.45 - 0.56 g/ml (loose)

Evaporation rate Not applicable

Boiling Point Not applicable

Melting / Freezing Point Not applicable

Water solubility dispersible

Minimum Ignition Energy No data available

Decomposition

temperature

Stable under normal conditions.

Self-accelarating

decomposition temperature

(CART)

(SADT)

No data available

Partition coefficient: n-

octanol/water

No data available

Flammability No data available

Flash point Not applicable

Auto-ignition temperature No data available

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Explosivity No data available

Particle size No data available

Other information Further safety related physical-chemical data are not known.



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SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition Stable under normal conditions.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous

reactions

No hazardous reactions when stored and handled according to

prescribed instructions.

Conditions to avoid Extremes of temperature and direct sunlight.

Exposure to moisture.

Incompatible materials Strong acids, Strong bases, Strong oxidizing agents, Strong reducing

agents

Hazardous decomposition

products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Eye contact, Skin Absorption, Ingestion, Inhalation

Immediate Effects

Eye Causes irritation, redness.

Skin Harmful if absorbed through skin. May cause irritation, redness,

swelling.

Ingestion Harmful if swallowed.

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

Information on toxicological effects

Acute oral toxicity LD50 (male/female combined Rat) 2,860 mg/kg

Acute inhalation toxicity LC50 (male/female combined Rat) > 5.0 mg/l

Exposure time: 4 h

Determined in the form of dust.

Acute dermal toxicity LD50 (Rabbit) > 2,020 mg/kg

Skin corrosion/irritation Slight irritant effect - does not require labelling. (Rabbit)

Serious eye damage/eye

irritation

Mild eye irritation. (Rabbit)

Respiratory or skin

sensitisation

Skin: Non-sensitizing. (Guinea pig)

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



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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.

ACGIH

Fosetyl-Aluminium Group A4 39148-24-8

NTP

None.

IARC

None.

OSHA

None.

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.

Further information

Only acute toxicity studies have been performed on the formulated product.

The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) > 120 mg/l

Exposure time: 96 h

Test conducted with a similar formulation.

Toxicity to aquatic EC50 (Daphnia magna (Water flea)) 37 mg/l invertebrates

Exposure time: 48 h

Test conducted with a similar formulation.

Toxicity to aquatic plants EC50 (Desmodesmus subspicatus (green algae)) 27.7 mg/l

Growth rate; Exposure time: 72 h

Test conducted with a similar formulation.

Biodegradability Fosetyl Aluminium:

rapidly biodegradable



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Koc Fosetyl Aluminium: Koc: 0.1

Bioaccumulation Fosetyl Aluminium:

Does not bioaccumulate.

Mobility in soil Fosetyl Aluminium: Highly mobile in soils

Additional ecological

information

No other effects to be mentioned.

Environmental precautions Drift and runoff from treated areas may be hazardous to 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.

Do not contaminate surface or ground water by cleaning equipment or

disposal of wastes, including equipment wash water.

Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Dispose of contents/container in accordance with local regulation.

Contaminated packaging Do not re-use empty containers.

Triple rinse containers.

Completely empty container into application equipment, then dispose of

empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities.

If burned, stay out of smoke.

Follow advice on product label and/or leaflet.

RCRA Information Characterization and proper disposal of this material as a special or

hazardous waste is dependent upon Federal, State and local laws and

are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN

POISON

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-890



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US Federal Regulations

TSCA list

Nonylphenol, branched, polyethoxylate 68412-54-4 Lignosulfonic acid, sodium salt, 68512-34-5

sulfomethylated

Water 7732-18-5 Sodium acetate – anhydrous 127-09-3

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

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

Yes

US States Regulatory Reporting

CA Prop65

WARNING: This product contains a chemical known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Crystalline quartz (respirable) 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

Crystalline guartz (respirable) 14808-60-7 MN, RI

None.

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: Harmful if swallowed, inhaled or absorbed through the skin.

Causes moderate eye injury.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR Code of Federal Regulations, Title 49
ACGIH US. ACGIH Threshold Limit Values

ATE Acute toxicity estimate

CAS-Nr. Chemical Abstracts Service number

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act



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EINECS European inventory of existing commercial substances

ELINCS European list of notified chemical substances
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IMDG International Maritime Dangerous Goods

N.O.S. Not otherwise specified

NTP US. National Toxicology Program (NTP) Report on Carcinogens OECD Organization for Economic Co-operation and Development

TDG Transportation of Dangerous Goods

TWA Time weighted average

UN United Nations

WHO World health organisation

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 0 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 0 Physical Hazard - 0 PPE -

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

Reason for Revision: The following sections have been revised: Section 2: Hazards Identification. Section 3: Composition / Information on Ingredients. Section 15: Regulatory information. Reviewed and updated for general editorial purposes.

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