

SAFETY DATA SHEET



ALLEGIANCE® FL

Version 2.0 / CDN
102000027133

1/11
Revision Date: 08/05/2020
Print Date: 08/06/2020

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

Product identifier

Trade name ALLEGIANCE® FL
Product code (UVP) 84961019
SDS Number 102000027133
PCP Registration No. 26674

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

Use Fungicide, Seed treatment
Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer CropScience Inc
#200, 160 Quarry Park Blvd, SE
Calgary, Alberta T2C 3G3
Canada
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 1-888-283-6847

SECTION 2: HAZARDS IDENTIFICATION

Classified in accordance with Part 2 of the Hazardous Products Regulations

Eye irritation: Category 2B
Acute toxicity(Inhalation): Category 4

Labelling in accordance with Part 3 of the Hazardous Products Regulations



Signal word: Warning

Hazard statements

Causes eye irritation.
Harmful if inhaled.

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Precautionary statements

Wash thoroughly after handling.
Avoid breathing dust, mist, spray.
Use only outdoors or in a well-ventilated area.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor/physician if you feel unwell.

Hazards Not Otherwise Classified (HNOC)

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Metalaxyl	57837-19-1	28.35
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified	64742-52-5	8.0

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 To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

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Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.
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SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Foam, Dry chemical, Carbon dioxide (CO ₂)
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Unsuitable	High volume water jet
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Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.
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Advice for firefighters

Special protective equipment for firefighters	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
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Further information	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
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Flash point	No data available
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Auto-ignition temperature	No data available
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Lower explosion limit	No data available
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Upper explosion limit	No data available
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Explosivity	Not applicable
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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.
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Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
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Additional advice	Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal.
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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 handling Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation.

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. 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
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified (Mist.)	64742-52-5	5 mg/m ³ (TWA)	07 2009	CAD AB OEL
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified (Mist.)	64742-52-5	10 mg/m ³ (STEL)	07 2009	CAD AB OEL
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified (Mist.)	64742-52-5	1 mg/m ³ (TWA)	05 2013	CAD BC OEL
Distillates (petroleum),	64742-52-5	0.2 mg/m ³	05 2013	CAD BC

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hydrotreated heavy naphthenic; Baseoil -- unspecified (Mist.)		(TWA)		OEL
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified (Inhalable fraction.)	64742-52-5	5 mg/m3 (TWA)	03 2014	CAD MB OEL
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified (Inhalable fraction.)	64742-52-5	5 mg/m3 (TWA)	06 2015	CAD ON OEL
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified	64742-52-5	10 mg/m3 (15 MIN ACL)	05 2009	CAD SK OEL
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified	64742-52-5	5 mg/m3 (8 HR ACL)	05 2009	CAD SK OEL
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified (Mist.)	64742-52-5	10 mg/m3 (STEL)	09 2017	OEL (QUE)
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified (Mist.)	64742-52-5	5 mg/m3 (TWA)	09 2017	OEL (QUE)

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.

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Hand protection	Chemical resistant nitrile rubber gloves
Eye protection	Tightly fitting safety goggles
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

Information on basic physical and chemical properties

Form	Liquid
Colour	light brown
Odour	musty
Odour Threshold	No data available
pH	5.0 - 8.0 (100 %) (23 °C)
Melting point/range	No data available
Boiling Point	No data available
Flash point	No data available
Flammability	No data available
Auto-ignition temperature	No data available
Minimum ignition energy	Not applicable
Self-accelerating decomposition temperature (SADT)	No data available
Upper explosion limit	No data available
Lower explosion limit	No data available
Vapour pressure	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Relative density	No data available
Density	ca. 1.10 g/cm ³ (20 °C)
Water solubility	dispersible
Partition coefficient: n-octanol/water	No data available

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Viscosity, dynamic	250 - 600 mPa.s (25 °C) 160 - 300 mPa.s (20 °C) Velocity gradient 20 /s 75 - 115 mPa.s (20 °C) Velocity gradient 100 /s
Viscosity, kinematic	No data available
Oxidizing properties	No data available
Explosivity	Not applicable

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.
Incompatible materials	Strong acids, Strong bases, Oxidizing agents
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Skin contact, Eye contact, Ingestion, Inhalation
Immediate Effects	
Eye	Moderate eye irritation.
Skin	Harmful if absorbed through skin. May cause skin irritation.
Ingestion	Harmful if swallowed.
Inhalation	May be harmful if inhaled.
Information on toxicological effects	
Acute oral toxicity	LD50 (Rat) > 2,900 mg/kg
Acute inhalation toxicity	LC50 (Rat) > 2.67 mg/l Exposure time: 4 h Determined in the form of liquid aerosol.
Acute dermal toxicity	LD50 (Rabbit) > 2,000 mg/kg
Skin corrosion/irritation	No skin irritation (Rabbit)

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Serious eye damage/eye irritation Moderate eye irritation. (Rabbit)

Respiratory or skin sensitisation Skin: Non-sensitizing. (Guinea pig)

Assessment STOT Specific target organ toxicity – single exposure

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

Assessment STOT Specific target organ toxicity – repeated exposure

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

Assessment mutagenicity

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

Assessment carcinogenicity

Metalaxyl was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified	64742-52-5	Group A4
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NTP

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified	64742-52-5	1980
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IARC

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified	64742-52-5	Overall evaluation: 3
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil -- unspecified	64742-52-5	Overall evaluation: 1

OSHA

None.

Assessment toxicity to reproduction

Metalaxyl did not cause reproductive toxicity in a multi-generation study in rats.

Assessment developmental toxicity

Metalaxyl 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).

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SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Lepomis macrochirus (Bluegill sunfish)) > 100 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metalaxyl.
	LC50 (Oncorhynchus mykiss (rainbow trout)) > 100 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metalaxyl.
Toxicity to aquatic invertebrates	LC50 (Daphnia (water flea)) > 28 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient metalaxyl.
	EC50 (Mysidopsis bahia (mysid shrimp)) 25 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metalaxyl.
	EC50 (Oyster) 4.6 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metalaxyl.
Toxicity to aquatic plants	IC50 (Algae) 33 mg/l Exposure time: 5 Days The value mentioned relates to the active ingredient metalaxyl.
Biodegradability	Metalaxyl: Not rapidly biodegradable
Koc	Metalaxyl: Koc: 163
Bioaccumulation	Metalaxyl: Bioconcentration factor (BCF) < 7 Does not bioaccumulate.
Mobility in soil	Metalaxyl: Moderately mobile in soils
Results of PBT and vPvB assessment	
PBT and vPvB assessment	Metalaxyl: 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).
Environmental precautions	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. Do not apply when weather conditions favor runoff or drift. Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

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Product	Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging	Do not re-use empty containers. Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet.

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

PCP Registration No. 26674

PMRA Information:

Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

This chemical is a pest control product regulated by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. The following is the hazard information required on the pest control product label:

Signal word:	Warning!
Hazard statements:	Causes skin irritation. Causes eye irritation.

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

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

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CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
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 - 2 Flammability - 1 Instability - 0 Others - none

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

Health - 1 Flammability - 1 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 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Section 12. Ecological information. Section 15: Regulatory information. Reviewed and updated for general editorial purposes.

Revision Date: 08/04/2020

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