

SAFETY DATA SHEET



BAYLETON® 50 TURF AND ORNAMENTAL FUNGICIDE IN WATER SOLUBLE PACKETS SYSTEMIC FUNGICIDE

Version 4.0 / USA
102000012193

1/12
Revision Date: 02/08/2021
Print Date: 02/09/2021

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

Product identifier

Trade name BAYLETON® 50 TURF AND ORNAMENTAL FUNGICIDE IN WATER SOLUBLE PACKETS SYSTEMIC FUNGICIDE

Product code (UVP) 06107613

SDS Number 102000012193

EPA Registration No. 432-1360

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

Use Fungicide

Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer Environmental Science
A division of Bayer CropScience LP
5000 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

Skin sensitisation, Carcinogenicity: Category 1B

Classification in accordance with regulation HCS 29CFR §1910.1200

Acute toxicity(Oral, Inhalation): Category 4

Labelling in accordance with regulation HCS 29CFR §1910.1200



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Signal word: Danger

Hazard statements

- May cause an allergic skin reaction.
- May cause cancer.
- Harmful if swallowed or if inhaled.

Precautionary statements

- Avoid breathing dust, mist, spray.
- Contaminated work clothing should not be allowed out of the workplace.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- IF ON SKIN: Wash with plenty of water/ soap.
- If skin irritation or rash occurs: Get medical advice/ attention.
- Specific treatment (see supplemental first aid instructions on this label).
- Wash contaminated clothing before reuse.
- IF exposed or concerned: Get medical advice/ attention.
- IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
- Rinse mouth.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Call a POISON CENTER/doctor/physician if you feel unwell.
- Store locked up.
- Dispose of contents/container in accordance with local regulation.

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
Triadimefon	43121-43-3	50.0
Sodium dodecylbenzenesulfonate	25155-30-0	1.83
Sodium lignosulphonate	8061-51-6	8.00
Crystalline quartz (respirable)	14808-60-7	0.37

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.

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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	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. 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.
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	
Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water, Carbon dioxide (CO₂), Foam, Dry chemical

Unsuitable High volume water jet

Special hazards arising from the substance or mixture Accumulation of fine dust may entail the risk of a dust explosion in the presence of air., In the event of fire the following may be released:, Amines, Nitrogen oxides (NO_x), Carbon monoxide (CO), Hydrogen chloride (HCl)

Advice for firefighters

Special protective equipment for firefighters Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

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.

Flash point No data available

Auto-ignition temperature No data available

Lower explosion limit No data available

Upper explosion limit No data available

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Explosivity Dust may form explosive mixture in air.

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.

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 handling Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local 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. 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.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Triadimefon	43121-43-3	0.7 mg/m ³ (SK-SEN)		OES BCS*
Crystalline quartz (respirable) (Respirable fraction.)	14808-60-7	0.025 mg/m ³ (TWA)	02 2012	ACGIH
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.05 mg/m ³ (REL)	2016	NIOSH
Crystalline quartz (respirable)	14808-60-7	0.05 mg/m ³ (TWA)	03 2016	OSHA
Crystalline quartz (respirable)	14808-60-7	0.025 mg/m ³ (OSHA_ACT)	03 2016	OSHA
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.05 mg/m ³ (PEL)	03 2016	OSHA Z1
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.050 mg/m ³ (TWA)	01 2019	TN OEL
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.05 mg/m ³ (TWA PEL)	10 2016	US CA OEL
Crystalline quartz (respirable) (Respirable.)	14808-60-7	2.4millions of particles per cubic foot of air (TWA)	2000	Z3
Crystalline quartz (respirable) (Respirable.)	14808-60-7	0.1 mg/m ³ (TWA)	2000	Z3

*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.

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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 gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)
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

Information on basic physical and chemical properties

Form	granular
Colour	brown
Odour	sharp, musty
Odour Threshold	No data available
pH	7.0 - 8.5 (5 %) aqueous suspension
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	No data available
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

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Density	No data available
Bulk density	0.56 - 0.59 g/cm ³ (loose)
Water solubility	dispersible
Partition coefficient: n-octanol/water	No data available
Viscosity, dynamic	No data available
Viscosity, kinematic	No data available
Oxidizing properties	No data available
Explosivity	Dust may form explosive mixture in air.

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	Exposure to moisture. Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents, Acids
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Eye contact, Skin contact, Inhalation, Skin Absorption
Immediate Effects	
Skin	Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Ingestion	Harmful if swallowed.
Inhalation	Harmful if inhaled.
Information on toxicological effects	
Acute oral toxicity	LD50 (male Rat) 812 mg/kg

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	LD50 (female Rat) 1,470 mg/kg
Acute inhalation toxicity	LC50 (male/female combined Rat) > 3.5 mg/l Exposure time: 4 h Determined in the form of dust. (actual)
Acute dermal toxicity	LD50 (male/female combined Rat) > 2,000 mg/kg LD50 (male/female combined Rabbit) > 2,000 mg/kg
Skin corrosion/irritation	slight irritation (Rabbit)
Serious eye damage/eye irritation	Minimally irritating. (Rabbit)
Respiratory or skin sensitisation	Skin: Sensitising (Guinea pig) The value mentioned relates to the active ingredient triadimefon.

Assessment STOT Specific target organ toxicity – single exposure

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

Assessment STOT Specific target organ toxicity – repeated exposure

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

Assessment mutagenicity

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

Assessment carcinogenicity

Triadimefon was not carcinogenic in a lifetime feeding study in rats. Triadimefon caused an increased incidence of tumours in mice in the following organ(s): Liver. The mechanism that triggers these tumours is not relevant to humans.

ACGIH

Crystalline quartz (respirable)	14808-60-7	Group A2
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NTP

Crystalline quartz (respirable)	14808-60-7
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IARC

Crystalline quartz (respirable)	14808-60-7	Overall evaluation: 1
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OSHA

None.

Assessment toxicity to reproduction

Triadimefon caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. Triadimefon caused reduced fertility, a reduced pup survival.

Assessment developmental toxicity

Triadimefon caused developmental toxicity in only at dose levels toxic to the dams. Triadimefon caused an increased incidence of non-specific malformations.

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Further information

Acute toxicity studies have not been performed on this product as formulated.
Acute toxicity studies have been bridged from a similar formulation(s).
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 4.08 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient triadimefon.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 7.16 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient triadimefon.
Toxicity to aquatic plants	IC50 (Raphidocelis subcapitata (freshwater green alga)) 2.01 mg/l Exposure time: 120 h The value mentioned relates to the active ingredient triadimefon.
Biodegradability	Triadimefon: Not rapidly biodegradable
Koc	Triadimefon: Koc: 150 - 510
Bioaccumulation	Triadimefon: Bioconcentration factor (BCF) 31 Does not bioaccumulate.
Mobility in soil	Triadimefon: Moderately mobile in soils
Results of PBT and vPvB assessment	
PBT and vPvB assessment	Triadimefon: 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. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. 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. Follow container label instructions for disposal of wastes generated during use in compliance with the product label.
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

49CFR	Not dangerous goods / not hazardous material
IMDG	
UN number	3077
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRIADIMEFON MIXTURE)
IATA	
UN number	3077
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRIADIMEFON MIXTURE)

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.

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

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SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1360

US Federal Regulations

TSCA list

Kaolin	1332-58-7
Sodium lignosulphonate	8061-51-6
Sodium aluminium silicate	1344-00-9
Sodium dodecylbenzenesulfonate	25155-30-0

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
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WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Triadimefon	43121-43-3	Male reproductive toxin.
Triadimefon	43121-43-3	Developmental toxin.
Triadimefon	43121-43-3	Female reproductive toxin.

US State Right-To-Know Ingredients

Triadimefon	43121-43-3	NJ
Kaolin	1332-58-7	MN, RI
Sodium aluminium silicate	1344-00-9	CA
Sodium dodecylbenzenesulfonate	25155-30-0	CA, CT, IL, NJ

Environmental

CERCLA

Yes

Sodium dodecylbenzenesulfonate	25155-30-0
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Listed

Clean Water Section 307(a)(1)

None.

Safe Drinking Water Act Maximum Contaminant Levels

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

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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.
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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
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 - 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 2: Hazards Identification. Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Reviewed and updated for general editorial purposes.

Revision Date: 02/08/2021

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