

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

1/11

Revision Date: 04/23/2020
Print Date: 04/24/2020

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

Product identifier

Trade name	TRILEX® 2000
Product code (UVP)	79402996, 85410563
SDS Number	102000020382
EPA Registration No.	264-1068

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

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

Information on supplier

Supplier	Bayer CropScience LP 800 North Lindbergh Blvd. St. Louis, MO 63167 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	1-866-99BAYER (1-866-992-2937)
--------------------------------------	--------------------------------

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Acute toxicity(Inhalation): Category 4
Reproductive toxicity: Effects on or via lactation

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning

Hazard statements

Harmful if inhaled.
May cause harm to breast-fed children.

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

2/11

Revision Date: 04/23/2020
Print Date: 04/24/2020

Precautionary statements

Obtain special instructions before use.
Do not breathe dust or mist.
Avoid contact during pregnancy/ while nursing.
Use only outdoors or in a well-ventilated area.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor/physician if you feel unwell.
IF exposed or concerned: Get medical advice/ attention.

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
Trifloxystrobin	141517-21-7	7.12
Metalaxyl	57837-19-1	5.69

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

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

3/11

Revision Date: 04/23/2020
Print Date: 04/24/2020

Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.
------------------	--

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Carbon dioxide (CO ₂), Foam, Dry chemical, Water spray
-----------------	--

Unsuitable	High volume water jet
-------------------	-----------------------

Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.
--	---

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
------------------------------	-------------------

Explosivity	Not applicable
--------------------	----------------

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	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.
--------------------------------	---

Additional advice	Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal.
--------------------------	--

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

4/11

Revision Date: 04/23/2020
Print Date: 04/24/2020

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 Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.

Advice on protection against fire and explosion Keep away from heat and sources of ignition.

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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Trifloxystrobin	141517-21-7	2.7 mg/m ³ (SK-SEN)		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

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

5/11

Revision Date: 04/23/2020
Print Date: 04/24/2020

Eye protection	Chemical resistant goggles must be worn.
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

Appearance	white to light beige
Physical State	suspension
Odor	characteristic
Odour Threshold	No data available
pH	6.3 - 7.8 (100 %) (23 °C)
Viscosity, kinematic	No data available
Vapor Pressure	No data available
Vapor Density (Air = 1)	No data available
Density	1.08 g/cm ³ (20 °C)
Evaporation rate	No data available
Boiling Point	No data available
Melting / Freezing Point	No data available
Water solubility	dispersible
Minimum Ignition Energy	Not applicable
Decomposition temperature	Stable under normal conditions.
Self-accelerating decomposition temperature (SADT)	No data available
Partition coefficient: n-octanol/water	No data available
Flammability	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Explosivity	Not applicable

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

6/11

Revision Date: 04/23/2020
Print Date: 04/24/2020

Particle size	No data available
Other information	Further safety related physical-chemical data are not known.

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	Eye contact, Inhalation, Skin contact, Ingestion
Immediate Effects	
Eye	Causes moderate eye irritation.
Skin	Harmful if absorbed through skin.
Ingestion	Harmful if swallowed.
Inhalation	Harmful if inhaled.
Information on toxicological effects	
Acute oral toxicity	LD50 (female Rat) > 2,000 mg/kg
Acute inhalation toxicity	LC50 (Rat) > 2.59 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. highest concentration tested No deaths
Acute dermal toxicity	LD50 (Rat) > 5,000 mg/kg
Skin corrosion/irritation	slight irritation (Rabbit)
Serious eye damage/eye irritation	Minimally irritating. (Rabbit)
Respiratory or skin sensitisation	Skin: Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Buehler test

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

7/11

Revision Date: 04/23/2020
Print Date: 04/24/2020

Assessment STOT Specific target organ toxicity – single exposure

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

Assessment STOT Specific target organ toxicity – repeated exposure

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

Assessment mutagenicity

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

Assessment carcinogenicity

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

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Trifloxystrobin caused reduced body weight development in offspring during lactation only at doses also producing systemic toxicity in adult rats.
Metalaxyl did not cause reproductive toxicity in a multi-generation study in rats.

Assessment developmental toxicity

Trifloxystrobin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Trifloxystrobin are related to maternal toxicity.
Metalaxyl did not cause developmental toxicity in rats and rabbits.

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)) 0.015 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient trifloxystrobin.

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

8/11

Revision Date: 04/23/2020

Print Date: 04/24/2020

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 0.016 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient trifloxystrobin.

LC50 (Mysidopsis bahia (mysid shrimp)) 0.00862 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient trifloxystrobin.

Toxicity to aquatic plants

IC50 (Desmodesmus subspicatus (green algae)) 0.0053 mg/l
Growth rate; Exposure time: 72 h
The value mentioned relates to the active ingredient trifloxystrobin.

EC10 (Desmodesmus subspicatus (green algae)) 0.0025 mg/l
Growth rate; Exposure time: 72 h
The value mentioned relates to the active ingredient trifloxystrobin.

Biodegradability

Trifloxystrobin:
Not rapidly biodegradable
Metalaxyl:
Not rapidly biodegradable

Koc

Trifloxystrobin: Koc: 2377
Metalaxyl: Koc: 163

Bioaccumulation

Trifloxystrobin: Bioconcentration factor (BCF) 431
Does not bioaccumulate.
Metalaxyl: Bioconcentration factor (BCF) < 7
Does not bioaccumulate.

Mobility in soil

Trifloxystrobin: Slightly mobile in soils
Metalaxyl: Moderately mobile in soils

Additional ecological information

Exposed treated seed may be hazardous to birds.

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.
Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

Contaminated packaging

Do not re-use empty containers.
Triple rinse containers.

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

9/11

Revision Date: 04/23/2020
Print Date: 04/24/2020

Puncture container to avoid re-use.
Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning.
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	3082
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN SOLUTION)

IATA

UN number	3082
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN SOLUTION)

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

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 264-1068

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

10/11

Revision Date: 04/23/2020
Print Date: 04/24/2020

US Federal Regulations

TSCA list

Water	7732-18-5
Glycerine	56-81-5
1,2-Propanediol	57-55-6

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

None.

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

Glycerine	56-81-5	MN, RI
1,2-Propanediol	57-55-6	MN, RI
Crystalline quartz (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.
Moderate eye irritation.

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

SAFETY DATA SHEET



TRILEX® 2000

Version 4.0 / USA
102000020382

11/11

Revision Date: 04/23/2020
Print Date: 04/24/2020

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.

Section 11: Toxicological Information. Section 12. Ecological information. Reviewed and updated for general editorial purposes.

Revision Date: 04/23/2020

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.