



FLINT® FUNGICIDE

Version 2.0 / USA
102000011560

1/11
Revision Date: 03/13/2014
Print Date: 03/19/2015

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

Product identifier

Trade name FLINT® FUNGICIDE

Product code (UVP) 06351867

SDS Number 102000011560

EPA Registration No. 264-777

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

Use Fungicide

Restrictions on use See product label for restrictions.

Information on manufacturer

Bayer CropScience
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

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

Product Information
Telephone Number 1-866-99BAYER (1-866-992-2937)

SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Acute toxicity (Inhalation): Category 4

Eye irritation : Category 2B

Skin sensitisation : Category 1B



Signal word: Warning

Hazard statements

Harmful if inhaled.

Causes eye irritation.

May cause an allergic skin reaction.

Precautionary statements

Avoid breathing dust, mist, spray.

Use only outdoors or in a well-ventilated area.



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Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/ physician if you feel unwell.
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 ON SKIN: Wash with plenty of soap and water.
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.
Dispose of contents/container in accordance with local regulation.

Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Average % by Weight
Trifloxystrobin	141517-21-7	50.00
Diatomaceous earth	61790-53-2	10.00

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



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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. There is no specific antidote.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Dry chemical, Foam, Carbon dioxide (CO ₂), Water
Unsuitable	None known.

Special hazards arising from the substance or mixture In the event of fire the following may be released:, Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Carbon monoxide (CO), Nitrogen oxides (NO_x)

Advice for firefighters

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

Further information Evacuate personnel to safe areas. Avoid contact with spilled product or contaminated surfaces. Contain the spread of the fire-fighting media. Keep out of smoke. Do not allow run-off from fire fighting to enter drains or water courses.
After fire is extinguished, do not turn on any ignition source until the area is determined to be free from explosion or fire hazard.

Flash point not applicable

Autoignition temperature 320 °C / 608 °F

Lower explosion limit not applicable

Upper explosion limit not applicable

Explosivity no data available

Dust explosion class no data available



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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. Use personal protective equipment.

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. Collect and transfer the product into a properly labelled and tightly closed container. Decontaminate tools and equipment following cleanup. Clean contaminated floors and objects thoroughly, observing environmental regulations. Contaminated soil may have to be removed and disposed.

Additional advice 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. Avoid contact with skin, eyes and clothing. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

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. 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. Store in a place accessible by authorized persons only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
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Trifloxystrobin	141517-21-7	2.7 mg/m3 (TWA)		OES BCS*
Diatomaceous earth	61790-53-2	6 mg/m3 (TWA)	1989	OSHA Z1A
Diatomaceous earth (Respirable dust.)	61790-53-2	3 mg/m3 (TWA PEL)	09 2006	US CA OEL
Diatomaceous earth (Total dust.)	61790-53-2	6 mg/m3 (TWA PEL)	09 2006	US CA OEL
Diatomaceous earth	61790-53-2	6 mg/m3 (TWA PEL)	09 2006	US CA OEL
Diatomaceous earth (Particulate.)	61790-53-2	27ug/m3 (ST ESL)	07 2011	TX ESL
Diatomaceous earth (Particulate.)	61790-53-2	40ug/m3 (ST ESL)	07 2011	TX ESL
Diatomaceous earth (Particulate.)	61790-53-2	2ug/m3 (AN ESL)	07 2011	TX ESL
Diatomaceous earth (Particulate.)	61790-53-2	4ug/m3 (AN ESL)	07 2011	TX ESL
Diatomaceous earth	61790-53-2	6 mg/m3 (TWA)	1989	OSHA Z1A
Diatomaceous earth	61790-53-2	6 mg/m3 (TWA)	06 2008	TN OEL
Diatomaceous earth (Total dust.)	61790-53-2	6 mg/m3 (TWA PEL)	08 2010	US CA OEL
Diatomaceous earth (Respirable dust.)	61790-53-2	3 mg/m3 (TWA PEL)	08 2010	US CA OEL
Diatomaceous earth	61790-53-2	6 mg/m3 (TWA PEL)	08 2010	US CA OEL
Diatomaceous earth	61790-53-2	2ug/m3 (AN ESL)	03 2012	TX ESL
Diatomaceous earth	61790-53-2	4ug/m3 (AN ESL)	03 2012	TX ESL
Diatomaceous earth	61790-53-2	27ug/m3 (ST ESL)	03 2012	TX ESL
Diatomaceous earth	61790-53-2	40ug/m3 (ST ESL)	03 2012	TX ESL
Sodium sulphate	7757-82-6	10 mg/m3 (TWA)		OES BCS*
Sodium sulphate (Particulate.)	7757-82-6	50ug/m3 (ST ESL)	02 2013	TX ESL
Sodium sulphate (Particulate.)	7757-82-6	5ug/m3 (AN ESL)	02 2013	TX ESL

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Exposure controls



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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. Coveralls
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	brown
Physical State	water-dispersible granules
Odor	none
Odour Threshold	no data available
pH	9 - 11 at 1 % dispersion in water
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Bulk density	27 - 32 lb/ft ³
Evaporation rate	not applicable
Boiling Point	no data available
Melting / Freezing Point	not applicable
Water solubility	dispersible
Minimum Ignition Energy	no data available
Decomposition temperature	no data available
Partition coefficient: n-octanol/water	no data available
Viscosity	not applicable
Flash point	not applicable



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Autoignition temperature	320 °C / 608 °F
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Explosivity	no data available
Dust explosion class	no data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	no data available
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	no data available
Incompatible materials	no data available
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Eye contact, Skin contact, Skin Absorption, Inhalation
Immediate Effects	
Eye	May cause mild irritation to eyes.
Skin	May cause slight irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if absorbed through skin.

Information on toxicological effects

Acute oral toxicity	LD50 (rat) > 5,050 mg/kg
Acute inhalation toxicity	LC50 (rat) > 2.7 mg/l Exposure time: 4 h Determined in the form of dust. LC50 (rat) > 10.8 mg/l Exposure time: 1 h Determined in the form of dust. Extrapolated from the 4 hr LC50.
Acute dermal toxicity	LD50 (rat) > 2,000 mg/kg



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Skin irritation	Slight irritation (rabbit)
Eye irritation	Mild eye irritation. (rabbit)
Sensitisation	Sensitising (guinea pig) Sensitising (mouse) OECD Test Guideline 429, local lymph node assay (LLNA)

Assessment repeated dose toxicity

Trifloxystrobin 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.

Assessment Carcinogenicity

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

ACGIH

None.

NTP

None.

OSHA

None.

Assessment toxicity to reproduction

Trifloxystrobin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Trifloxystrobin is related to parental toxicity.

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.

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 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 0.015 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient trifloxystrobin.
Toxicity to aquatic invertebrates	EC50 (Water flea (<i>Daphnia magna</i>)) 0.016 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient trifloxystrobin.
Toxicity to aquatic plants	IC50 (<i>Desmodosmus subspicatus</i>) 0.0053 mg/l



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	Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient trifloxystrobin.
Biodegradability	Trifloxystrobin: ; not rapidly biodegradable
Koc	Trifloxystrobin: Koc: 2377
Bioaccumulation	Trifloxystrobin: Bioconcentration factor (BCF) 431; Does not bioaccumulate.
Mobility in soil	Trifloxystrobin: Slightly mobile in soils
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.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

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. It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines.
Contaminated packaging	Do not re-use empty containers. Triple rinse containers. Puncture container to avoid re-use. Consult state and local regulations regarding the proper disposal of container. 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.



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(TRIFLOXYSTROBIN MIXTURE)

IATA

UN number	3077
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRIFLOXYSTROBIN 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

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 264-777

US Federal Regulations

TSCA list

Diatomaceous earth 61790-53-2

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

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Diatomaceous earth 61790-53-2 IL, MN

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels



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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: Causes eye irritation.
Harmful if absorbed through skin.
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Avoid contact with skin, eyes and clothing.
Wash thoroughly with soap and water after handling.

SECTION 16: OTHER INFORMATION

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: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

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