



**Material Safety Data Sheet**  
**FLINT® FUNGICIDE**

MSDS Number: 102000011560  
 MSDS Version 1.2  
 Revision Date: 07/21/2008

**SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

**Product Name** FLINT® FUNGICIDE  
**MSDS Number** 102000011560  
**EPA Registration No.** 264-777

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

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)  
 For Product Information call: 1-866-99BAYER (1-866-992-2937)

**SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS**

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

**SECTION 3. HAZARDS IDENTIFICATION**

*NOTE: Please refer to Section 11 for detailed toxicological information.*

**Emergency Overview** Caution! 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.

**Physical State** granular solid

**Appearance** brown

**Routes of Exposure** Eye contact, Skin contact, Skin Absorption, Inhalation

**Immediate Effects**

**Eye** May cause mild irritation to eyes. Do not get in eyes.

**Skin** May cause slight irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if absorbed through skin.

**Ingestion** Do not take internally.

**Inhalation** Do not breathe dust or spray mist.

**Chronic or Delayed Long-Term** This product is not listed by NTP, IARC or regulated as a carcinogen by OSHA. This product or its components may have long term (chronic) health effects.



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**Medical Conditions Aggravated by Exposure** As with all materials which can cause upper respiratory tract irritation, persons with a history of asthma, emphysema, or hyperreactive airways disease may be more susceptible to overexposure. Individuals with allergic history or pre-existing dermatitis should use extra care in handling this product.

**Target Organs** Liver

**Potential Environmental Effect** Toxic to fish and aquatic invertebrates.

**SECTION 4. FIRST AID MEASURES**

**General** When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

**Eye** 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.

**Skin** 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.

**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.

**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.

**Notes to Physician Treatment** There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

**SECTION 5. FIRE FIGHTING MEASURES**

**Flash point** not applicable

**Autoignition Temperature** 320 °C / 608 °F



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<b>Fire and Explosion Hazards</b>	In the event of fire the following can be released: Hydrogen cyanide (hydrocyanic acid) Hydrogen fluoride (HF) Carbon monoxide (CO) Nitrogen oxides (NOx)
<b>Suitable Extinguishing Media</b>	Dry chemical, Foam, Carbon dioxide (CO2), Water
<b>Fire Fighting Instructions</b>	<p>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.</p> <p>After fire is extinguished, do not turn on any ignition source until the area is determined to be free from explosion or fire hazard.</p> <p>Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.</p>

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.
<b>Methods for Cleaning Up</b>	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. Avoid dust formation. Decontaminate tools and equipment following cleanup. Clean contaminated floors and objects thoroughly, observing environmental regulations. Contaminated soil may have to be removed and disposed.
<b>Additional Advice</b>	Do not allow to enter soil, waterways or waste water canal. Information regarding waste disposal, see section 13.

**SECTION 7. HANDLING AND STORAGE**

<b>Handling Procedures</b>	<p>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.</p> <p>Keep away from heat and sources of ignition.</p>
<b>Storing Procedures</b>	Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container. Store in a place accessible by authorized persons only.
<b>Work/Hygienic</b>	Handle in accordance with good industrial hygiene and safety practice. Wash



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**Procedures** 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.

**Min/Max Storage Temperatures** no data available

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**General Protection** Keep and wash PPE separately from other laundry. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.

**Eye/Face Protection** Safety glasses with side-shields

**Hand Protection** Chemical resistant nitrile rubber gloves

**Body Protection** Wear long-sleeved shirt and long pants and shoes plus socks. Coveralls

**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.

**Exposure Limits**

Trifloxystrobin	141517-21-7	OES BCS*		2.7 mg/m3
Diatomaceous earth	61790-53-2	OSHA Z1A	TWA	6 mg/m3
		US CA OEL	TWA PEL	3 mg/m3
		US CA OEL	TWA PEL	6 mg/m3
		US CA OEL	TWA PEL	6 mg/m3
		TX ESL	ST ESL	40 ug/m3
		TX ESL	AN ESL	4 ug/m3

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

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** brown

**Physical State** granular solid

**Bulk Density** 27 - 32 lb/ft³



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**Water solubility** 0.00061 g/l

**SECTION 10. STABILITY AND REACTIVITY**

**Hazardous Reactions** No hazardous reactions when stored and handled according to prescribed instructions.

**SECTION 11. TOXICOLOGICAL INFORMATION**

Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the technical-grade active ingredient, trifloxystrobin.

**Acute Oral Toxicity** rat: LD50: > 5,050 mg/kg

**Acute Dermal Toxicity** rat: LD50: > 2,000 mg/kg

**Acute Inhalation Toxicity** rat: LC50: > 2.7 mg/l  
 Exposure time: 4 h  
 Determined in the form of dust.

rat: LC50: > 10.8 mg/l  
 Exposure time: 1 h  
 Determined in the form of dust.  
 Extrapolated from the 4 hr LC50.

**Skin Irritation** rabbit: Slight irritation.

**Eye Irritation** rabbit: Mild eye irritation.

**Sensitization** guinea pig: sensitizing

**Chronic Toxicity** mouse: sensitizing  
 Trifloxystrobin caused liver effects in chronic studies in mice, rats and/or dogs.

**Assessment Carcinogenicity**

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

**ACGIH**

None.

**NTP**

None.

**IARC**

**OSHA**

None.

**Reproductive & Developmental Toxicity** REPRODUCTION: Trifloxystrobin is not considered a primary reproductive toxicant in rats.



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**DEVELOPMENTAL TOXICITY:** Trifloxystrobin is not considered a primary developmental toxicant in laboratory animals. Developmental effects were observed only at doses that caused maternal toxicity.

**Neurotoxicity** Trifloxystrobin is not a primary neurotoxicant based on an acute (oral gavage) neurotoxicity screening study in rats.

**Mutagenicity** Trifloxystrobin was not considered mutagenic or genotoxic based on in vitro and in vivo tests.

**SECTION 12. ECOLOGICAL INFORMATION**

**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**

**General Disposal Guidance** 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.

**Container Disposal** 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.

**SECTION 14. TRANSPORT INFORMATION**

**TRANSPORTATION CLASSIFICATION:**  
 Not regulated for transportation

**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



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**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
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**Canadian Regulations**

**Canadian Domestic Substance List**

None.

**Environmental**

**CERCLA**

None.

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

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**SECTION 16. OTHER INFORMATION**

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NFPA 704 (National Fire Protection Association):

Health - 1      Flammability - 1      Reactivity - 0      Others - none

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

Reason to Revise: Updated for general editorial purposes.

Revision Date: 07/21/2008

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