



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

MSDS Number: 102000011560  
 MSDS Version 1.1  
 Revision Date: 01/17/2008

**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	9.50

**SECTION 3. HAZARDS IDENTIFICATION**

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

**Emergency Overview** Caution! Moderate 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, Inhalation, Skin Absorption

**Immediate Effects**  
**Eye** Mild eye irritation.

**Skin** Slight irritation. Prolonged skin contact may cause skin irritation and/or dermatitis.

**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 target organ effects.

**Medical Conditions Aggravated by Exposure** Individuals with allergic history or pre-existing dermatitis should use extra care in handling this product.



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

**SECTION 4. FIRST AID MEASURES**

<b>General</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye</b>	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.
<b>Skin</b>	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.
<b>Ingestion</b>	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.
<b>Inhalation</b>	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.
<b>Notes to Physician Treatment</b>	There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

**SECTION 5. FIRE FIGHTING MEASURES**

<b>Flash point</b>	not applicable
<b>Autoignition Temperature</b>	320 °C / 608 °F
<b>Suitable Extinguishing Media</b>	Dry chemical, Foam, Carbon dioxide (CO2)
<b>Fire Fighting Instructions</b>	<p>Evacuate personnel to safe areas. Whenever possible, contain fire-fighting water by diking area with sand or earth. Keep out of smoke. Fight fire from upwind position.</p> <p>Do not allow run-off from fire fighting to enter drains or water courses.</p> <p>Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.</p>



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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal Precautions**      Avoid contact with spilled product or contaminated surfaces. Keep unauthorized people away. Avoid dust formation.
- Methods for Cleaning Up**      Clean contaminated floors and objects thoroughly, observing environmental regulations. Sweep up or vacuum up spillage and collect in suitable container for disposal.

**SECTION 7. HANDLING AND STORAGE**

- Handling Procedures**      Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation.  
  
Keep away from heat and sources of ignition.
- Storing Procedures**      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 and out of the reach of children, preferably in a locked storage area.
- Work/Hygienic Procedures**      Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.  
  
Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

**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**      Waterproof 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	ACGIH	TWA	10 mg/m3



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	Form of exposure		Inhalable fraction.
	Remarks		The value is for particulate matter containing no asbestos and <1% crystalline silica.
ACGIH		TWA	3 mg/m3
	Form of exposure		Respirable fraction.
	Remarks		The value is for particulate matter containing no asbestos and <1% crystalline silica.
OSHA Z1A		TWA	6 mg/m3
US CA OEL		TWA PEL	3 mg/m3
	Form of exposure		Respirable dust.
US CA OEL		TWA PEL	6 mg/m3
	Form of exposure		Total dust.
US CA OEL		TWA PEL	6 mg/m3
OSHA Z1		PEL	5 mg/m3
	Form of exposure		Respirable fraction.
OSHA Z1		PEL	15 mg/m3
	Form of exposure		Total dust.
Z3		TWA	15 millions of particles per cubic foot of air
	Form of exposure		Respirable fraction.
Z3		TWA	50 millions of particles per cubic foot of air
	Form of exposure		Total dust.
Z3		TWA	5 mg/m3
	Form of exposure		Respirable fraction.
Z3		TWA	15 mg/m3
	Form of exposure		Total dust.
Z3		TWA	20 millions of particles per cubic foot of air
Z3		TWA	0.8 mg/m3
	Remarks		The value is calculated from a specified equation using a value of 100%. Values lower than 100% will give higher exposure limits. See regulation for specific equation.
NIOSH		REL	6 mg/m3

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



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#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	brown
<b>Physical State</b>	granular solid
<b>Bulk Density</b>	27 - 32 lb/ft <sup>3</sup>
<b>Water solubility</b>	0.00061 g/l

#### SECTION 10. STABILITY AND REACTIVITY

<b>Hazardous Reactions</b>	No hazardous reactions known. Stable under recommended storage conditions.
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#### SECTION 11. TOXICOLOGICAL INFORMATION

The non-acute information pertains to the technical-grade active ingredient, trifloxystrobin.

<b>Acute Oral Toxicity</b>	male/female combined rat: LD50: > 5,050 mg/kg
<b>Acute Dermal Toxicity</b>	male/female combined rat: LD50: > 2,000 mg/kg
<b>Acute Inhalation Toxicity</b>	male/female combined rat: LC50: > 2.74 mg/l Exposure time: 4 h Determined in the form of dust. (actual)
	male/female combined rat: LC50: > 10.96 mg/l Exposure time: 1 h Determined in the form of dust. Extrapolated from the 4 hr LC50. (actual)
<b>Skin Irritation</b>	rabbit: Slight irritation.
<b>Eye Irritation</b>	rabbit: Moderate eye irritation.
<b>Sensitization</b>	guinea pig: Non-sensitizing.
<b>Chronic Toxicity</b>	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.



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**NTP**

None.

**IARC**

Diatomaceous earth

61790-53-2

Overall evaluation: 3

**OSHA**

None.

**Reproductive & Developmental Toxicity**

REPRODUCTION: Trifloxystrobin is not considered a primary reproductive toxicant in rats.

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. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Retain and dispose of contaminated wash water.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**General Disposal Guidance**

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.

**Container Disposal**

Triple rinse containers. Puncture container to avoid re-use. Do not re-use empty containers. 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



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**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 CA, IL, MN, RI

**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.

**SECTION 16. OTHER INFORMATION**

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 Section 3: HAZARDS IDENTIFICATION; Updated Section 11: TOXICOLOGICAL INFORMATION.



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