



**Material Safety Data Sheet**

**CHIPCO® TRITON™ 70 WDG FUNGICIDE**

MSDS Number: 102000020178

MSDS Version 1.0

Revision Date: 03/27/2008

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

**Product Name** CHIPCO® TRITON™ 70 WDG FUNGICIDE  
**MSDS Number** 102000020178  
**EPA Registration No.** 432-4877

Bayer Environmental Science  
 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: 1-800-331-2867

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

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Triticonazole	131983-72-7	70.00
Alkylated naphthalene sulfonate, formaldehyde polymer, sodium salt		10.00
Sodium 2-[methyloleoylamino] ethane-1-sulphonate	137-20-2	2.00
Quartz (Silica, Crystalline)	14808-60-7	0.27
Crystalline quartz (respirable)		
Cristobalite	14464-46-1	0.20

**SECTION 3. HAZARDS IDENTIFICATION**

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

**Emergency Overview** Caution! Harmful if absorbed through skin. Moderate eye irritation. Avoid contact with skin, eyes and clothing.

**Physical State** extrusion granulate

**Appearance** light tan to brown

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

**Immediate Effects**

**Eye** Moderate eye irritation. Avoid contact with eyes.

**Skin** Harmful if absorbed through skin. Avoid contact with skin and clothing.

**Ingestion** Do not take internally.

**Inhalation** Avoid breathing dust.



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**Chronic or Delayed Long-Term**

This product is not listed as a carcinogen by ACGIH, NTP, IARC or OSHA. However, it may contain crystalline silica (quartz), a substance which has been listed as a carcinogen by ACGIH, NTP and IARC. Crystalline silica is a naturally-occurring mineral component of many sands and clays. Although the carcinogenic potential of crystalline silica in humans is controversial, it must be considered if it is inhaled under excessive exposure conditions. The respirable portion of the silica that may be contained in this product, however, is small, such that inhalation exposure during anticipated conditions of use is minimal.

This product or its components may have target organ effects.

**Medical Conditions Aggravated by Exposure**

No specific medical conditions are known which may be aggravated by exposure to this product. 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. Pulmonary and respiratory diseases may be aggravated by exposure to respirable crystalline silica.

**Potential Environmental Effect**

Toxic to 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.



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**SECTION 5. FIRE FIGHTING MEASURES**

<b>Flash point</b>	not applicable
<b>Fire and Explosion Hazards</b>	In the event of fire the following can be released: Carbon monoxide (CO) Hydrogen chloride (HCl) Nitrogen oxides (NOx)  Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.
<b>Suitable Extinguishing Media</b>	Water spray, Dry chemical, Carbon dioxide (CO2), Foam
<b>Fire Fighting Instructions</b>	Keep out of smoke. Fight fire from upwind position. Cool closed containers/ tanks exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.  Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
<b>Methods for Cleaning Up</b>	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.
<b>Additional Advice</b>	Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

**SECTION 7. HANDLING AND STORAGE**

<b>Handling Procedures</b>	Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation. Handle and open container in a manner as to prevent spillage.  Dust may form explosive mixtures with air. Take measures to prevent the build up of electrostatic charge.
<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 and out of the reach of children, preferably in a locked storage area.



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Protect from freezing.

**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 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.

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

<b>General Protection</b>	Follow all label instructions. Train employees in safe use of the product.  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.
<b>Eye/Face Protection</b>	Tightly fitting safety goggles
<b>Hand Protection</b>	Chemical resistant nitrile rubber gloves
<b>Body Protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.
<b>Respiratory Protection</b>	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**

Triticonazole Quartz (Silica, Crystalline)	131983-72-7	OES BCS*		4 mg/m3	
		14808-60-7	ACGIH	TWA	0.025 mg/m3
			NIOSH	REL	0.05 mg/m3
	14808-60-7	OSHA Z1A	TWA	0.1 mg/m3	
		Z3	TWA	2.4 millions of particles per cubic foot of air	
		Z3	TWA	0.1 mg/m3	
		Z3	TWA	0.3 mg/m3	
		US CA OEL	TWA PEL	0.1 mg/m3	
		US CA OEL	TWA PEL	0.3 mg/m3	
		TX ESL	ST ESL	1 ug/m3	
		TX ESL	ST ESL	1 ug/m3	
		TX ESL	AN ESL	0.1 ug/m3	
		TX ESL	AN ESL	0.1 ug/m3	
Cristobalite	14464-46-1	ACGIH	TWA	0.025 mg/m3	
		OSHA Z1A	TWA	0.05 mg/m3	
		Z3	TWA	1.2 millions of particles per	



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			cubic foot of air
Z3	TWA		0.05 mg/m3
Z3	TWA		0.15 mg/m3
US CA OEL	TWA PEL		0.05 mg/m3
TX ESL	ST ESL		0.5 ug/m3
TX ESL	ST ESL		0.5 ug/m3
TX ESL	AN ESL		0.05 ug/m3
TX ESL	AN ESL		0.05 ug/m3

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

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	light tan to brown
<b>Physical State</b>	extrusion granulate
<b>pH</b>	6.5 - 8.0 (1 %)
<b>Bulk Density</b>	32 - 36 lb/ft <sup>3</sup>

**SECTION 10. STABILITY AND REACTIVITY**

<b>Hazardous Decomposition Products</b>	Thermal decomposition can lead to release of: Carbon monoxide Hydrogen chloride (HCl) Nitrogen oxides (NOx) organochlorides
<b>Hazardous Reactions</b>	No hazardous reactions when stored and handled according to prescribed instructions. Stable under normal conditions.

**SECTION 11. TOXICOLOGICAL INFORMATION**

Acute toxicity data have been bridged from a similar granular formulation containing a higher percentage of the active ingredient, triticonazole. The non-acute information pertains to the technical-grade active ingredient.

<b>Acute Oral Toxicity</b>	rat: LD50: > 5,000 mg/kg
<b>Acute Dermal Toxicity</b>	rat: LD50: > 2,000 mg/kg



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**Acute Inhalation Toxicity** rat: LC50: > 2.44 mg/l  
 Exposure time: 4 h  
 Determined in the form of dust.  
 highest concentration tested  
 No deaths

rat: LC50: > 9.76 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: Moderate eye irritation.

**Sensitization** guinea pig: Non-sensitizing.

**Chronic Toxicity** Triticonazole caused liver and/or adrenal effects in chronic studies in rats and dogs.

**Assessment Carcinogenicity**

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

**ACGIH**

Quartz (Silica, Crystalline)	14808-60-7	Group A2
Cristobalite	14464-46-1	Group A2

**NTP**

Crystalline quartz (respirable)

**IARC**

Quartz (Silica, Crystalline)	14808-60-7	Overall evaluation: 1
Cristobalite	14464-46-1	Overall evaluation: 1

**OSHA**

None.

**Reproductive & Developmental Toxicity** REPRODUCTION: Triticonazole was not a primary reproductive toxicant in a two-generation reproduction study in rats. Reproductive effects were observed only at high doses that caused systemic toxicity in parental animals.

DEVELOPMENTAL TOXICITY: Triticonazole was not a primary developmental toxicant in rats and rabbits. Any developmental effects observed were considered secondary to maternal toxicity.

**Neurotoxicity** Triticonazole was not a neurotoxicant in acute and subchronic neurotoxicity screening studies in rats.

**Mutagenicity** Triticonazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**SECTION 12. ECOLOGICAL INFORMATION**



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**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. Apply this product as specified on the label.

**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. 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.

**SECTION 14. TRANSPORT INFORMATION**

**DOT CLASSIFICATION:**  
Not regulated for Domestic Surface Shipment

**FREIGHT CLASSIFICATION:**  
Insecticides or Fungicides, N.O.I.; other than poison

**SECTION 15. REGULATORY INFORMATION**

**EPA Registration No.** 432-4877

**US Federal Regulations**

**TSCA list**

Alkylated naphthalene sulfonate, formaldehyde polymer, sodium salt  
Sodium 2-[methyloleoylamino] ethane-1-sulphonate 137-20-2  
Quartz (Silica, Crystalline) 14808-60-7  
Cristobalite 14464-46-1

**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 contains a chemical known to the State of California to cause cancer.  
Crystalline quartz (respirable)



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

**US State Right-To-Know Ingredients**

Quartz (Silica, Crystalline)	14808-60-7	IL, MA, MN
Cristobalite	14464-46-1	IL, MA, MN

**Canadian Regulations**

**Canadian Domestic Substance List**

Alkylated naphthalene sulfonate, formaldehyde polymer, sodium salt	
Sodium 2-[methyloleoylamino] ethane-1-sulphonate	137-20-2
Quartz (Silica, Crystalline)	14808-60-7
Cristobalite	14464-46-1

**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: New Material Safety Data Sheet.

Revision Date: 03/27/2008

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