



# MATERIAL SAFETY DATA SHEET

## CROWN

**Version:** 1.5  
**Date of Issue:** 01/03/2007  
**Date printed:** 01/04/2007

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### 1. PRODUCT AND COMPANY IDENTIFICATION

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**Product name :** CROWN

**Chemical name:** Fungicide

**Use of substance/preparation:** Fungicide

**Supplier:** Chemtura Canada Co./Cie  
25 ERB STREET  
Elmira, Ontario N3B 3A3 Canada

**Manufacturer:** Chemtura USA Corporation  
199 Benson Road  
Middlebury, CT 06749 USA

**Prepared by :** CHEMTURA Product Safety Department 866-430-2775 Date of Issue: 01/03/2007

**Emergency telephone number:** 866-744-3060 (Canada)  
CANUTEC (24 hours) 613-996-6666  
For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

**Environmental, Health and Safety Department:** 866-430-2775

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### 2. COMPOSITION / INFORMATION ON INGREDIENTS

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INGREDIENT	% BY WEIGHT
Carboxin CAS# 5234-68-4	9
Thiabendazol CAS# 148-79-8	5.7
Ethylene glycol CAS# 107-21-1	10 - 30

#### WHMIS CLASSIFICATION

This product is registered under the Pest Control Products Act and is therefore exempt from WHMIS supplier labeling and MSDS requirements. Please read entire MSDS and product label for safety precautions.

CPR Compliance  
This product has been classified with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.

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### 3. HAZARDS IDENTIFICATION

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**EMERGENCY OVERVIEW**  
**CAUTION!**  
**MAY CAUSE EYE AND SKIN IRRITATION.**

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**4. FIRST AID MEASURES**

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**Swallowing**

If patient is fully conscious, give two glasses of water. Induce vomiting. Obtain medical attention immediately. Do not give milk, oily products, fat or alcohol. Do not give anything by mouth to an unconscious person.

**Inhalation**

Remove to fresh air. Give artificial respiration if not breathing. Obtain medical attention.

**Skin contact**

Wash skin with soap and water. Remove contaminated clothing. Wash clothing before re-use. Obtain medical attention if irritation persists.

**Eye contact**

Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention.

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**5. FIRE-FIGHTING MEASURES**

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**Flash point:** > 98 °C

**Hazardous combustion products**

Oxides of carbon.  
Oxides of nitrogen.  
Oxides of sulfur.

**Special fire fighting procedures**

Do not discharge extinguishing waters into streams, rivers and lakes.

**Special protective equipment for firefighters**

Body covering protective clothing, full "turn-out" gear.  
Self-contained breathing apparatus.

**Extinguishing media**

**Suitable:**           **Large fires:**  
                          - alcohol-type foam or universal-type foams  
                          **Small fires:**  
                          - CO2  
                          - dry chemical

**Unsuitable:**       - water jets

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**6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions**

Wear suitable protective equipment., Avoid contact with eyes and skin.

**Environmental precautions**

Prevent from entering sewer system, surface water or soil.

**Methods for cleaning up**

Observe government regulations.

**Small spills:**       **Absorb on inert material such as sand, earth, vermiculite.**  
                          **Collect for disposal.**

**Large spills**       **Dike to contain spill.**



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Pump excess material into suitable container (metal drums, metal tank, or such).

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### 7. HANDLING AND STORAGE

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#### HANDLING

##### Handling precautions

Do not get in eyes., Avoid prolonged or repeated contact with skin., Avoid breathing vapor., Use with adequate ventilation., Wash thoroughly after handling.

#### STORAGE

##### Storage requirements

Store in a cool, dry place.

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### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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#### EXPOSURE LIMIT VALUES

Consult local authorities for acceptable provincial values.

<u>Component</u>	<u>Country</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
Ethylene glycol	USA	Ceiling, ACGIH	100 mg/m3	(aerosol)

No other exposure limits have been established

#### PERSONAL PROTECTION

##### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment., The determination of appropriate respiratory protection is best performed, on a case by case basis, taking into consideration the exposure conditions of the particular operation., The respirator manufacturer should be consulted to ensure that the air-purifying cartridges utilized will provide adequate protection for the exposure conditions and period of wear concerned.

##### Hand protection / protective gloves

Chemical resistant protective gloves

##### Eye protection

Safety glasses with side shields.

##### Skin protection

Wear protective clothing, such as long sleeves to minimize skin contact.

##### Other protective equipment

Eye bath, Safety shower

#### ENGINEERING CONTROLS

##### Ventilation

General (mechanical) room ventilation is expected to be satisfactory., Special, local ventilation is needed at points where vapors can be expected to escape to the workplace air.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

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#### APPEARANCE

Physical state	Liquid
Color	Pink
Odor	Mild sweet
Odor threshold	Not available

#### OTHER PROPERTIES

Boiling point	Not available
Melting point	Not available



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**Solidification** < -8 °C  
**pH** 6.7 - 7.3  
**Density** 0.99 - 1.1 g/cm<sup>3</sup> at 15.6 °C  
**Solubility in water** Partially soluble  
**Solubility in organic solvents** No data available.  
**Evaporation rate (Butyl Acetate=1)** Not available  
**Partitioning coefficient** Not available  
**Flash point**  
> 98 °C  
Method: Tag Closed Cup  
**Autoignition temperature** Not available

### 10. STABILITY AND REACTIVITY

**Stability:** This product is stable under normal storage and handling conditions.

**Stability - Conditions to avoid:**

Strong oxidizing agents.  
Strong bases.

**Hazardous combustion products:**

Oxides of carbon.  
Oxides of nitrogen.  
Oxides of sulfur.

### 11. TOXICOLOGICAL INFORMATION

<u>Component data</u> Carboxin Acute toxicity - Swallowing:	LD50 - Rat Result: 2,900 mg/kg
<u>Component data</u> Ethylene glycol Acute toxicity - Swallowing:	LD50 - Rat (Females) Result: 4,700 mg/kg
<u>Component data</u> Carboxin Chronic toxicity - Swallowing:	NOEL - Rat Result: 5.5 mg/kg Exposure time: 90 d
<u>Component data</u> Carboxin Acute toxicity - Skin absorption:	LD50 - Rabbit Result: > 4,000 mg/kg
<u>Component data</u> Ethylene glycol Acute toxicity - Skin absorption:	LD50 - Rabbit Result: 10,670 mg/kg
<u>Component data</u> Carboxin	NOEL - Rats Result: 30 mg/kg



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Chronic toxicity - Skin absorption:	Exposure time: 28 d
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<u>Component data</u> Carboxin Acute toxicity - Inhalation:	LC50 - Rat Result: > 4.7 mg/l Exposure time: 4 h
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<u>Component data</u> Carboxin Skin irritation - Skin contact:	Species: Rabbit Result: Not irritating
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<u>Component data</u> Ethylene glycol Skin irritation - Skin contact:	Species: Rabbit Result: Minor irritation
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<u>Component data</u> Carboxin Eye irritation - Eye contact:	Species: Rabbit Result: Mild irritation
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### SENSITIZATION

#### Test results:

Remark: Test results are based on analogy with a similar material.  
Non sensitizing.

<u>Component data</u> Carboxin Sensitization:	Species: Guinea pigs Result: Non sensitizing. Method: Bühler-Test
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<u>Component data</u> Carboxin Sensitization:	Species: Guinea pigs Result: sensitizing Classification: not sensitizing Method: Magnusson-Kligmann-Test
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### CARCINOGENICITY

Component (Ethylene glycol): IARC Group 3: cannot be classified as carcinogenic to humans.

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## 12. ECOLOGICAL INFORMATION

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<u>Component ecotoxicology</u> Carboxin <u>Acute toxicity fish:</u>	LC50 - Rainbow trout (Oncorhynchus mykiss) Result: 2.3 mg/l Exposure time: 96 h
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<u>Component ecotoxicology</u> Carboxin <u>Acute toxicity fish:</u>	LC50 - Bluegill (Lepomis macrochirus) Result: 3.6 mg/l Exposure time: 96 h
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<u>Component ecotoxicology</u> Ethylene glycol <u>Chronic toxicity fish:</u>	EC50 - Rainbow trout (Oncorhynchus mykiss) Result: 41,000 mg/l Exposure time: 4 d
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<u>Component ecotoxicology</u> Ethylene glycol <u>Chronic toxicity fish:</u>	Static LC50 - Rainbow trout (Oncorhynchus mykiss) Result: 40,761 mg/l Exposure time: 4 d
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<u>Component ecotoxicology</u> Carboxin <u>Aquatic toxicity to plants:</u>	EC50 - Selenastrum capricornutum Result: 0.48 mg/l Exposure time: 120 h
<u>Component ecotoxicology</u> Ethylene glycol <u>Microorganisms:</u>	EC50 - Selenastrum capricornutum Result: 1,300 - 6,500 mg/l Exposure time: 96 h
<u>Component ecotoxicology</u> Ethylene glycol <u>Microorganisms:</u>	EC50 - Photobacterium phosphoreum: Result: 620 mg/l Exposure time: 0.5 h
<u>Component ecotoxicology</u> Carboxin <u>Acute toxicity to aquatic invertebrates:</u>	EC50 - Water flea (Daphnia magna) Result: > 57 mg/l Exposure time: 48 h
<u>Component ecotoxicology</u> Thiabendazol <u>Acute toxicity to aquatic invertebrates:</u>	LC50 - Water flea (Daphnia magna) Result: .45 ppm

### 13. DISPOSAL CONSIDERATIONS

**General:** Dispose of waste material in compliance with all federal, provincial and local regulations., Avoid discharge to sewers and natural waters.

### 14. TRANSPORT INFORMATION

#### IMDG Classification

This product is not regulated by IMDG.

#### ICAO Classification

This product is not regulated by ICAO.

### 15. REGULATORY INFORMATION

#### WHMIS CLASSIFICATION

This product is registered under the Pest Control Products Act and is therefore exempt from WHMIS supplier labeling and MSDS requirements. Please read entire MSDS and product label for safety precautions.

#### CPR Compliance

This product has been classified with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.

#### CHEMICAL INVENTORY

**Canada:** All substances in this product are exempt from the DSL as this product is registered under the Pest Control Products Act., PCP# 23430

#### EPA



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## 16. OTHER INFORMATION

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### FURTHER INFORMATION

MAY BE ON THE INVENTORY LIST BUT NOT NECESSARILY REGISTERED, (Korea, China, New Zealand) CONSULT REGULATORY SPECIALIST.

STP	Standard temperature and pressure
W/W	Weight/Weight

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