



# MATERIAL SAFETY DATA SHEET

## ***METASTAR ST***

Version: 1.0  
Date of Issue: 01/23/2008  
Date printed: 01/23/2008

---

### 1. PRODUCT AND COMPANY IDENTIFICATION

---

**Product name :** METASTAR ST

**Chemical name:** Metalaxyl (Active)

**Use of substance/preparation:** Fungicide

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

**Emergency telephone number:** CHEMTREC (24 hours) 800-424-9300, 703-527-3887  
Chemtura Corporation Emergency Response (24 hours) 800-292-5898

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

**Prepared by** Product Safety Department      Date of Issue: 01/23/2008  
(US) +1 866-430-2775  
(EU) +44 (0) 1753.603.000  
Email: MSDSRequest@chemtura.com

---

### 2. HAZARDS IDENTIFICATION

---

#### EMERGENCY OVERVIEW

#### WARNING!

MAY CAUSE MODERATE IRRITATION TO EYES.  
CAUSES SKIN IRRITATION.  
MAY BE HARMFUL IF SWALLOWED.

---

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

---

INGREDIENT	% BY WEIGHT
Metalaxyl CAS# 57837-19-1	28.35
Inerts CAS# -	71.65



**METASTAR ST**

Version: 1.0  
Date of Issue: 01/23/2008  
Date printed: 01/23/2008

---

**4. FIRST AID MEASURES**

---

**Swallowing**

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Inhalation**

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**Skin contact**

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

**Eye contact**

Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lens, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

**Notes to physician**

Avoid vomiting! Risk of aspiration.

---

**5. FIRE-FIGHTING MEASURES**

---

**Autoignition temperature:**

**Not available**

**Hazardous combustion products**

Oxides of carbon.  
Oxides of nitrogen.

**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  
                          - water spray

**Unsuitable:**       - water jets

---

**6. ACCIDENTAL RELEASE MEASURES**

---

**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.**



**METASTAR ST**

Version: 1.0  
Date of Issue: 01/23/2008  
Date printed: 01/23/2008

**Large spills**      **Dike to contain spill.**  
**Pump excess material into suitable container (metal drums, metal tank, or such).**

---

**7. HANDLING AND STORAGE**

---

**HANDLING**

**Handling precautions**

Do not eat, drink or smoke when handling., Avoid contact with eyes, skin and clothing., Avoid breathing vapor, aerosol and mist., Use with adequate ventilation., Wash thoroughly after handling.

**Other precautions**

NOTE TO END-USERS: The employee protection recommendations on this MSDS may differ from those on the product label. For normal use of this product, always refer to the personal protective equipment requirements on the product label.

**STORAGE**

**Storage requirements**

Store in a cool, dry place., Protect from heat., Protect from freezing.

---

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

---

**EXPOSURE LIMIT VALUES**

**PERSONAL PROTECTION**

**Respiratory protection**

In the absence of engineering controls sufficient to maintain airborne concentrations below recommended occupational exposure limit values, appropriate respiratory protection should be utilized., 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.

For emergency conditions where the exposure limit may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus.

**Hand protection / protective gloves**

Chemical resistant protective gloves

**Eye protection**

Safety glasses with side shields.

**Skin protection**

Chemical protective clothing.

**Other protective equipment**

Eye bath, Safety shower

**Industrial hygiene measures**

Before eating, drinking or smoking, wash hands and face thoroughly with soap and water.

**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.

---

**9. PHYSICAL AND CHEMICAL PROPERTIES**

---



## *METASTAR ST*

Version: 1.0  
Date of Issue: 01/23/2008  
Date printed: 01/23/2008

### APPEARANCE

**Physical state** Liquid  
**Color** Opaque  
Brown  
**Odor** Mild  
**Odor threshold** Not available

### OTHER PROPERTIES

**Boiling point** Not available  
**Melting point** Not available  
**pH** 5.9  
1%, Dispersion  
**Density** 1.068 g/cm<sup>3</sup> at 26 °C  
**Vapor pressure**  
**Solubility in water** Miscible  
**Partitioning coefficient** Not available  
**Flash point** Not available  
**Autoignition temperature** Not available  
**Dynamic viscosity** 548 mPa.s at 26 °C

---

## 10. STABILITY AND REACTIVITY

---

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

**Incompatible materials:**

Strong acids.  
Strong bases.

**Hazardous combustion products:**

Oxides of carbon.  
Oxides of nitrogen.

---

## 11. TOXICOLOGICAL INFORMATION

---

### SWALLOWING

Test results

Acute toxicity: Remark: No data available.

### SKIN ABSORPTION

Test results

Acute toxicity: LD50 - Rabbit  
Result: > 2,000 mg/kg  
Remark: (Active)

### INHALATION



**METASTAR ST**

Version: 1.0  
Date of Issue: 01/23/2008  
Date printed: 01/23/2008

Test results  
Acute toxicity: Remark: No data available.

SKIN CONTACT  
Test results  
Skin irritation: Result: Moderate

EYE CONTACT  
Test results  
Eye irritation: Result: Moderate

SENSITIZATION  
Test results: Remark: No information available.

---

**12. ECOLOGICAL INFORMATION**

---

This product is not tested.

---

**13. DISPOSAL CONSIDERATIONS**

---

**General:** Dispose of in accordance with appropriate Federal, State, and local regulations., Do not discharge to sewers and natural waters.

---

**14. TRANSPORT INFORMATION**

---

**DOT Classification**

This product is not regulated by DOT.

**IMDG Classification**

This product is not regulated by IMDG.

**ICAO Classification**

This product is not regulated by ICAO.

---

**15. REGULATORY INFORMATION**

---

**Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (RQ's) in 40CFR302.4.**

**Components present in this product at a level which could require reporting under the statute are:**

\*\*\*\* NONE \*\*\*\*

**Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPO's) and release reporting based on Reportable Quantities (RQ's) in 40CFR355 (used for SARA 302 and 304).**

**Components present in this product at a level which could require reporting under the statute are:**

\*\*\*\* NONE \*\*\*\*

**Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.**

**Components present in this product at a level which could require reporting under the statute are:**



# MATERIAL SAFETY DATA SHEET

## ***METASTAR ST***

Version: 1.0  
Date of Issue: 01/23/2008  
Date printed: 01/23/2008

\*\*\*\* NONE \*\*\*\*

EPA Hazard Categories (SARA 311, 312): Immediate Health Hazard

California Proposition 65  
\*\*\*\* NONE \*\*\*\*

### CHEMICAL INVENTORY

Europe: The ingredients of this product are on the EINECS inventory.  
United States: The ingredients of this product are on the TSCA inventory.  
Australia: The ingredients of this product are on the AICS inventory.  
China: The ingredients of this product are on the IECSC inventory.  
Korea: The ingredients of this product are on the ECL.  
Philippines: The ingredients of this product are on the PICCS.

## **16. OTHER INFORMATION**

RECOMMENDED USES AND RESTRICTIONS: NOTE TO END-USERS: This MSDS is being provided to all interested persons in accordance with federal and state right-to-know laws. Precautionary Statements, First Aid Statements and Directions for Use of this product by end-users are contained on the product label and must be followed at all times.

### **HMIS RATING**

<b>Health: 2</b>	<b>Flammability: 1</b>	<b>Reactivity: 0</b>	<b>PPI:</b>
------------------	------------------------	----------------------	-------------

STP	Standard temperature and pressure
W/W	Weight/Weight
0 (HMIS)	0 (HMIS)
1 (HMIS)	Slight hazard
2 (HMIS)	Moderate hazard
3 (HMIS)	Serious hazard
4 (HMIS)	Severe hazard
X (HMIS)	Personal protection rating to be supplied by user depending on use conditions

Copyright  
2007  
Chemtura  
Corporation

THE OPINIONS EXPRESSED HEREIN ARE THOSE OF QUALIFIED EXPERTS WITHIN CHEMTURA CORPORATION. WE BELIEVE THAT THE INFORMATION CONTAINED HEREIN IS CURRENT AS OF THE DATE OF THIS SAFETY DATA SHEET. SINCE THE USE OF THIS INFORMATION AND OF THESE OPINIONS AND THE CONDITIONS OF USE OF THIS PRODUCT ARE NOT WITHIN THE CONTROL OF CHEMTURA CORPORATION, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE PRODUCTS.