

# MATERIAL SAFETY DATA SHEET

## TEBUCURE 250 EW

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### COMPANY DETAILS:

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### IDENTIFICATION

Common Name: Tebuconazole  
IUPAC Name: (RS)-1-p-chlorophenyl-4,4-dimethyl-3-(1H-1,2,4-triazol-1-ylmethyl)pentan-3-ol  
Molecular formula:  $C_{16}H_{22}ClN_3O$   
Molecular weight: 307.8  
CAS registry number: 107534-96-3  
Use: Formulated fungicide for agricultural use  
Content: 250 g/L Tebuconazole

### PHYSICAL DESCRIPTION/PROPERTIES

Colour	Yellowish
Physical State	Transparent viscous liquid
Formulation	Emulsion, oil in water
Odour	Chemical odour
Content of Active	250 g/L tebuconazole
Specific Gravity	~1.02 g/ml at 20 °C
Boiling Point	No data
Flash Point	80 °C (IP 170)
Emulsion stability	Stable (CIPAC F 36.1.1)
Emulsification	Initial & re-emulsification complete (CIPAC F 36.1.1)
Persistent foam	12 ml foam after 1 min (CIPAC F MT 47.1)
pH	4.5-7
Stability	Resistant to thermal decomposition when stored and handled under normal conditions

## HEALTH HAZARD INFORMATION

### Health Effects:

#### *Acute:*

- Swallowed: Harmful if swallowed.  
Eye: Risk of serious damage to eyes.  
Skin: Can irritate and burn skin and harmful if absorbed through skin.  
Inhaled: Vapours is toxic by inhalation and irritate respiratory tract.

*Chronic:* Tebuconazole showed no evidence of carcinogenicity in rats and mice at maximum tolerated dose. There may be effects on the following organs: spleen, liver, adrenals and lens of the eye. Tebucure 250 EW can be toxic to liver and effects kidneys, cardiovascular system and central nervous system.

### First Aid

- Swallowed: Wash out mouth with water and give large amounts of water to drink. Do not induce vomiting. Keep patient at rest and seek medical advice.  
Eye: Rinse eyes immediately with clean water for at least 15 minutes and seek medical advice.  
Skin: Carefully remove contaminated clothing. Wash affected areas with soap and water. Seek medical aid for treatment advice.  
Inhaled: If inhaled, immediately remove to fresh air and keep at rest. If person is not breathing give artificial respiration if possible. Obtain medical advice.

### Advice to Doctor:

The following symptoms may occur:

No specific medical conditions are known which may be aggravated by exposure to the active ingredient, however, pulmonary and respiratory diseases may be aggravated by exposure.

There is no specific antidote available. Treat poisoning symptomatically.

## PRECAUTIONS FOR USE

Engineering Controls: Control process conditions to avoid contact. Use only in well-ventilated areas away from any area where fire hazard may be acute.

#### Personal Protection:

- Eyes: Wear safety goggles or face shield.  
Clothing: Wear cotton overalls buttoned to the neck and wrist to avoid skin contact.  
Gloves: Wear elbow-length PVC gloves.  
Respiratory: Wear a respirator if inhalation of vapour is possible.  
Other: After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves, goggles or face shield, respirator face piece and contaminated clothing.

**SAFE HANDLING INFORMATION****Storage and Transport:**

Corrosivity Hazards: Non-corrosive.

**Handling & Storage Precautions:**

Keep out of reach of children. Product is poisonous if swallowed, inhaled and absorbed through skin. Will irritate the eyes. Avoid contact with eyes. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Store in the closed, original container in a cool, dry, well ventilated, secure area away from fire hazard. Do not store for prolonged periods in direct sunlight. Keep away from food, drink and animal feed. Protect the product from frost.

**Spills and Disposal:**

Spillage or Leak Procedures: Avoid contact with the spilled material or contaminated surfaces. When dealing with spills do not eat, drink or smoke and wear personal protective clothing and equipment. Prevent spilled material from entering drains or watercourses. Contain spill and absorb with earth, sand or clay. Collect and store in properly labeled, sealed drums for safe disposal. Deal with all spillages immediately.

Waste Disposal Methods: Triple or (preferably) pressure rinse containers before disposal. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. Dispose of waste product via a licensed disposal contractor to an approved landfill.

**Fire/Explosion Hazard**

Extinguishing Media: Water spray, foam, dry powder, carbon dioxide or sand.

Special Fire Fighting Procedures: Fire fighters should wear full protective gear, including self-contained breathing apparatus. Toxic decomposition products may be produced in a fire. If it can be done safely, remove intact containers from the fire. Otherwise, use water spray to cool them. Bund area to prevent contamination of water sources. Dispose of fire control water or other extinguishing agent and spillage later.

Reactivity Hazards: May give off toxic fumes such as carbon monoxide, nitrogen oxides, and hydrochloric acid if burnt.

**OTHER INFORMATION****Animal toxicity data:**

Oral LD <sub>50</sub> (mg/kg)	>2000	Species: rat
Dermal LD <sub>50</sub> (mg/kg)	>4000	Species: rat
Eye irritation	Severe eye irritant	Species: rabbit
Skin irritation	slight skin irritant	Species: rabbit
Sensitization	not sensitizing	Species: Guinea pig

**Environmental/Ecological effects:**

Dangerous to fish and other aquatic organisms. Low toxicity to birds, bees and earthworms.

**TRANSPORT & REGULATORY INFORMATION****Rail / Road / Sea / Air**

Class:	9
UN no.:	3082
Pack. Group:	III
Proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (Tebuconazole 25%)

*The information contained on this sheet is based on knowledge of the product on date of publication. It is given in good faith.*