

## Material Safety Data Sheet Tebuconazole Technical

### 1. Chemical Product and Company Identification

Product Name : Tebuconazole Technical

Formula :  $C_{16} H_{22} CIN_3 O$ 

Molecuar Weight : 307.8

:  $(\pm)-\alpha-[2-(4-\text{chlorophenyl})]-\alpha-(1,1-\text{dimethylethyl})]-1$ *H*-1,2,4-

Chemical Name triazol-1-ethanol

Manufacturer : Excel Crop Care Limited

184 / 87, S. V. Road, Jogeshwari (West), Mumbai, (India). Pin code: 400 102 Contact no: +912266464200

Emergency Contact Details : +91 22 42522201

: +91 22 42522202 : +91 278 2212320

### 2. Composition/Information on Ingredients

Component CAS No. % W/W content

Tebuconazole 107534-96-3 98 minimum

### 3. Hazard Identification

### **Emergency Overview**

**Appearance and odour**: White crystalline powder, no characteristic odour

Warning Statements : Keep out of reach of children

**Potential Health Effects** 

**Likely Routs of Exposure**: Skin contact, Inhalation and Ingestion

Eye Contact: Mild irritant to the eyes

Skin contact: Mild irritant to skin

**Ingestion**: May be harmful if swallowed. .

**Inhalation**: Unlikely to be harmful by this route.

Version: ECCL/MSDS/TEBU98TECH/1

DoC: Sept 10, 2014 DoU: Sept 25, 2014 © Excel Crop Care Ltd Private Document Issue Date: Oct 1, 2014





## **Material Safety Data Sheet Tebuconazole Technical**

**Environmental Hazards**: The product is a fungicide

#### 4. First aid measures and Antidote

Emergency and First Aid Procedure -

If in Eyes Immediately flush with plenty of clean water for 15-20 minutes.

Remove contact lenses if present after 5 minutes of washing. Get

medical attention

If on Skin : Wash with plenty of clean water and soap. Get medical attention.

If Inhaled : Remove person to fresh air, if required give artificial respiration. Call

doctor or poison control centre.

If Swallowed Immediately offer drinking water to the person, if able to swallow. Do

not induce vomiting, but do not stop if it happens spontaneously. Get

medical attention

Note to Physician : Treat symptomatically.

**Antidote** No antidote known.

### 5. Fire Fighting Measures

Hazardous product of Combustion

The essential breakdown products are carbon monoxide, carbon

dioxide and nitrogen oxides.

**Extinguishing Media** 

Foam, Dry chemical powder, CO<sub>2</sub> type fire extinguisher or Flood with

water.

**Unusual Fire and Explosion Hazards**  The product does not pose any unusual fire hazard. It is advisable for

firemen to avoid direct contact.

Fire Fighting Equipment:

Evacuate area and fight fire from a safe distance. Approach from

upwind to avoid hazardous vapours and decomposition products. Use self-contained breathing apparatus. Used equipments should be

thoroughly decontaminated





# Material Safety Data Sheet Tebuconazole Technical

#### 6. Accidental Release Measure

# Personal Protection

: Observe all protection and safety precautions. Depending on the magnitude of the spill, use of eye protection, gloves and boots when cleaning up spills are recommended. For PPE see Section 8

# Steps to be taken in case of a spill

It is recommended to have a predetermined plan / SOP for the handling of spills.

Stop the source of the spill immediately, if safe to do so. Contain the spill to prevent any further contamination of soil or water.

Keep all bystanders away. Wear full-length clothing and PVC gloves. Shovel and collect the spilled material / contaminated absorbent and place in suitable containers. Thoroughly scrub the floor or other impervious surfaces with a strong industrial detergent and rinse with water.

**Spills in water** should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal through incineration.

### 7. Handling and Storage

# Precautions in Handling

In an industrial environment, such as while making formulation, filling or packing, it is recommended to avoid physical contact with the product and to have adequate ventilation.

Avoid spillage into the eyes, or contact with bare skin or clothing. Avoid inhaling spray mist. Wash hands, feet, face thoroughly after handling. Remove contaminated clothing immediately

# Precautions in Storage

The product is stable under normal conditions of warehouse storage. Keep container lids tightly closed

Store in a cool, dry, well- ventilated place away from foodstuffs, animal feed under lock & key

Specific Use

The product is meant / approved to be used as fungicide.



# Material Safety Data Sheet Tebuconazole Technical

### 8. Exposure Controls/Personal Protection

Exposure Limit Values

: Exposure limits have not been established for Tebuconazole or any other component of this product. However, exposure limit values defined by local regulations may exist and must be checked / observed.

Personal Protection

: When used in a closed / automated system, personal protection equipment may not be required. When closed system is not possible in case of maintenance, repair, sampling etc, systems must be made nonhazardous before opening

Respiratory Protection

: The product is not likely to pose inhalation exposure concern during normal handling. In the event of an accidental discharge of the material during manufacture or handling which produces a dust or mist, workers should put on respiratory protection equipment with a universal filter

**Protective Gloves**: Wear appropriate gloves

**Eye Protection**: Wear goggles, face shield or safety glasses. It is recommended to have an

eye wash fountain available in the work area.

**Skin Protection**: Wear appropriate protective clothing to prevent direct skin contact

## 9. Physical and Chemical Properties

Physical State : Solid

**Appearance**: White powder

Odour : No characteristic odour

**Density** : 1.28±0.08 at 20 °C. **pH value** : 6.49± 0.03 at 20.1 °C

Viscosity : Not Applicable

1.9077 x 10<sup>-5</sup>Pa

Vapour Pressure

Vapour Density : Not known

**Melting Point / Freezing** 

**Point** 

: 104.4± 1°C

Boiling Point : Not Applicable
Flash Point : Not Applicable





# Material Safety Data Sheet Tebuconazole Technical

Auto Ignition Temp: Not applicableFlammable Limits: Not applicable

**Solubility in Water** :  $0.027 \pm 0.001$ g/L at 20 °C

10. Stability and Reactivity

**Chemical Stability**: Product is stable at ambient conditions of storage

Refer to section no. 5

Materials to Avoid : Data not available

Hazardous

**Decomposition Product** 

Hazardous : Not known

**Polymerisation** 

11. Toxicological Information

**Health Hazards** : Refer to section no. 3

**Acute Toxicity** : The product is practically non-toxic. However, it should be treated

with the usual care of handling hazardous chemicals.

Route(s) of Entry

Ingestion: LD<sub>50</sub>, oral, rat: > 2000 mg/kg body weight of female rat

Skin : LD<sub>50</sub>, dermal, rat: > 2000 mg/kg body weight

Inhalation : 4 hour LC<sub>50</sub>, rat: > 2.48 mg/L air

12. Ecological Information

**Acute dietary Toxicity** 

in Birds

In Japanese quail> 5000 ppm.

Acute Toxicity in Fish : Rainbow trout )

LC<sub>50</sub> (96 hrs) 3.2mg/L

**Acute Toxicity Honey** 

bees

 $LC_{50}$  48 Hrs. > 100µg/bee (contact)



# Material Safety Data Sheet Tebuconazole Technical

### 13. Disposal Considerations

Waste Treatment Methods

: Keep out of drains, sewers, ditches and waterways.

Left-over material that should not be used or chemically reprocessed and should be disposed of in a landfill approved for pesticide disposal. Other possible methods of disposal are controlled incineration with flue gas

scrubbing

**Containers** 

: Emptied containers may retain vapour and product residue. Observe all

labeled safeguards until container is cleaned or destroyed.

Triple or pressure rinse empty containers. Pour rinse water into formulation tank. Store for collection by approved waste disposal service.

Dispose of as non hazardous industrial waste. Do not re-use containers.

Disposal of waste and packaging materials must always be in accordance

with all applicable local laws / regulations.

### 14. Transport Information

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

Not hazardous under the applicable DOT, ICAO/IATA, IMO, TDG and Mexican regulations.

UN Classification - Not classified as hazardous material for transport.

**DOT (Department Of Transportation)** 

**DOT Proper Shipping Name** : Environmentally Hazardous substance, Solid, n. o. s.

(Tebuconazole)

**DOT Hazard class / I D No.** : 9

DOT Label : Class-9.1

HAZCHEM No : 4 W

UN Number : 3077

Packing group : III



## Material Safety Data Sheet Tebuconazole Technical

### 15. Regulatory Information

Contains : Tebuconazole Technical ( CAS No. 107534-96-3)

**Product Classification** 

Acute : Yes
Chronic : No
Fire : No
Reactivity : No
Pressure Generating : No

**NFPA Codes** 

Health : 1
Flammability : 0
Reactivity : 0

Regulatory Status : The product is meant for the production of fungicide

formulations which may only be used for the applications that are registered for, in accordance with an officially

approved label

#### 16. Other Information

This MSDS is intended for worker and transport safety. It summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

This material should be handled by persons who are made aware of its hazardous properties and have been instructed in the required safety precautions.

This MSDS is not intended for product users who should refer to the product label for safety precautions applicable to them.

The information provided in this safety data sheet is believed to be accurate and reliable, but uses of the product may vary and situations unforeseen by Excel Crop Care Limited may exist. The user has to check the validity of the information under local circumstances.