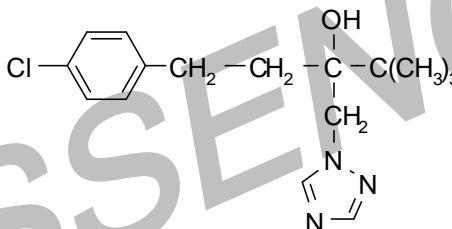


Material Safety Data Sheet

Product Name: Tebuconazole

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Tebuconazole
Formulation: 25%EW
CAS: 107534-96-3
Chemical Name: (±)-a-[2-(4-chlorophenyl)ethyl]-a-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol
Molecular Weight: 307.8
Chemical Formulation: C₁₆H₂₂ClN₃O
Chemical Structure:



Uses: As a seed dressing, tebuconazole is effective against various smut and bunt diseases of cereals such as *Tilletia* spp., *Ustilago* spp., and *Urocystis* spp., also against *Septoria nodorum* (seed-borne), at 1-3g/dt seed; and *Sphacelotheca reiliana* in maize, at 7.5g/dt seed.

Manufacturer: Nanjing Essence Fine-Chemical Co., Ltd
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Telephone Number: +86 25 86518999
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SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average by Weight</u>
Tebuconazole	107534-96-3	25%

SECTION 3. HAZARDS IDENTIFICATION

Eye Contact: Mild irritant to eyes.

Skin Contact:	Non-irritating to skin
Inhalation:	Harmful if inhaled. Avoid breathing dust or spray mist.
Ingestion:	Harmful if ingested.
Signs and symptoms:	Have the product container or label with you when calling a poison control center or doctor or going for treatment.

SECTION 4. FIRST AID MEASURES

Skin Contact:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor or treatment advice.
Eye Contact:	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 poison control center or doctor for treatment advice.
Inhalation:	Move person to fresh air. If person is not breathing, call an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor or further treatment advice.
Ingestion:	Immediately call a poison control center or doctor for treatment advice. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Have a person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.
Note to physician:	There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5. FIRE FIGHTING MEASURES

Fire And Explosion Hazards	There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.
Extinguishing Media:	Dry chemical, alcohol foam, water spray, carbon dioxide (CO2)

Special Fire Fighting Procedure:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind if possible. Keep out of low areas, persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection:

Personnel handling this material should be thoroughly trained to handle spills and releases. Wear appropriate gear for the situation. See personal protection information in Section VII.

Clean-up Procedure:

Sweep up and place in an appropriate closed container (in section VI: handling and storage). No sparking tools should be used. Avoid creation of dusty conditions. Clean up residual material by washing area with water and detergent. Collect washings for disposal. Decontaminate tools and equipment following cleanup. Stop leak if it can be done without risk. Follow procedure under cleanup and disposal of spill. Do not flush to drain. If spilled on the ground, the affected area should be scraped clean and placed in an appropriate container for disposal. Prevent material from entering public sewer system or any waterway.

SECTION 7. HANDLING AND STORAGE

Handling:

KEEP OUT OF REACH OF CHILDREN AND ANIMALS.
Personnel handling this product should be thoroughly trained as to its hazards. Use non-sparking tools and grounded/bonded equipment and containers when transferring. Do not ingest. Do not breathe dust or mists. Avoid getting material on clothing. Use handling, storage and disposal procedures that will prevent contamination of water, food or feed.
THIS PRODUCT MAY PRESENT A DUST EXPLOSION HAZARD.
Dry powders can build static electricity charges when subjected to the friction of conveying, mixing or sliding.

Provide adequate precautions, such as electrical grounding, or inert atmospheres when material is used in the presence of flammable materials to prevent ignition.

It is recommended that all dust control equipment and material transport systems involved in handling of this product contain explosion relief vents or explosion suppression system or an oxygen deficient environment. In addition, all conductive elements of the system that contact this material should be electrically bonded and grounded. This powder should not be flowed through non-conductive ducts or pipes. Use only appropriately classed electrical equipment.

Storage:

Do not store in or around the home. Store unused product in a cool, ventilated, dry, locked area. Never transfer this product to another container for storage. Do not allow prolonged storage in areas where temperatures frequently exceed 46°C.

Work/Hygienic procedure:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material;

Wash hand before eating, drinking, and chewing gum, using tobacco or using the toilet.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

Personal Protection:

Applicators and other handlers must wear long-sleeved shirts and long pants, waterproof gloves, shoes plus socks and chemical resistant headgear for overhead exposure.

Eye/Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Off-white liquid

Odor:	Aromatic
A. I. Content:	25%
Water Solubility:	36mg/l(pH 5-9,20°C)(tech)
PH:	4.0-9.0

SECTION 10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions
Conditions to avoid:	Open flame. Sparks. Overheating.
Hazardous decomposition:	Thermal decomposition generates hydrogen chloride and oxides of nitrogen, sulfur and carbon.
Hazardous polymerization:	Will not polymerize.

SECTION 11. TOXICOLOGICAL INFORMATION

Oral(acute):	Rat: LD50=4000mg/kg
Dermal(acute):	Rabbit: LD50: >2000 mg/kg
Inhalation(acute):	Rat: LC50>5000 mg/kg.
Skin Irritation:	Non-irritating to skin
Eye irritation:	Mildly irritating
Chronic toxicity:	In long-term animal feeding studies there was no evidence of carcinogenicity. Not considered a carcinogen or mutagen.

SECTION 12. ECOLOGICAL INFORMATION

Environmental precautions:	The degradation of tebuconazole in soil was slow in laboratory studies. Under field conditions, the compound degraded much more rapidly, and did not accumulate in long-term studies (3-5y). Since no residues could be detected in deeper soil layers of these and other studies, and adsorption/ adsorptions studies indicated a low mobility in the soil, groundwater contamination through leaching can be excluded. In natural waters, hydrolysis and indirect photolysis occur; in a pond study, the compound dissipated from the water body with DT50 1-4 w. Low vapor pressure and strong adsorption result in low volatilization into the air.
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SECTION 13. DISPOSAL CONSIDERATIONS

General disposal guidance:	Do not contaminate water, food, or feed by storage or disposal. Contamination with this product will render water, food or
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feed unfit for human or animal consumption. Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Container disposal:

Do not reuse outer bag. Dispose of outer bag in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

SECTION 14. TRANSPORT INFORMATION

Container disposal: fungicide

SECTION 15. REGULATORY INFORMATION

NEPA RATING

HEALTH.....1	FLAMMABILITY.....1
REACTIVITY.....0	{0 Minimal 1 slight 2Moderate 3 Serious 4 Extreme }

SECTION 16. OTHER INFORMATION

Cleary Chemical Corp. believes that the information and recommendations contained herein are accurate as of the date hereof. The information provided herein applies only to the specific product designated and may not be valid where said product is used in combination with any other material or in any process. It is the user's responsibility to determine the suitability of the information for their purposes. No warranty of fitness for any particular purpose, warranty of merchantability, or any other warranty, expressed or implied, is made concerning the information provided.