

Material Safety Data Sheet

SECTION 1: PRODUCT IDENTIFICATION

Product name: Tebuconazole 30 g/L+ Thiamethoxam 250 g/L FS

Chemical name:

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

Thiamethoxam: $3\text{-}[(2\text{-chloro-}5\text{-thiazolyl)methyl]tetrahydro-}5\text{-methyl-}N\text{-nitro-}4H\text{-}1,3,5\text{-oxadiazin-}4\text{-imine}$

Molecular formula:

Tebuconazole: $\text{C}_{16}\text{H}_{22}\text{ClN}_3\text{O}$

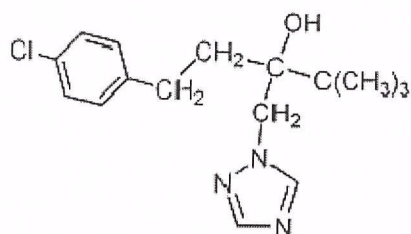
Thiamethoxam: $\text{C}_8\text{H}_{10}\text{ClN}_5\text{O}_3\text{S}$

CAS RN:

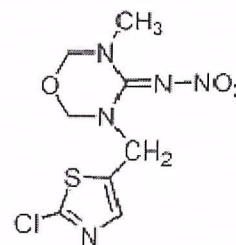
Tebuconazole: 107534-96-3

Thiamethoxam: 153719-23-4

Structure:



Tebuconazole



Thiamethoxam



SECTION 2: COMPOSITION AND INGREDIENT INFORMATION

| | |
|--------------|---------|
| Tebuconazole | 30 g/L |
| Thiamethoxam | 250 g/L |

SECTION 3: HEALTH HAZARD INFORMATION

Emergency overview: Keep out of reach of children. Harmful if swallowed. Avoid contact with skin and eyes.

SECTION 4: FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

Skin contact: Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse

Eye contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.

Ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

SECTION 5: FIRE AND EXPLOSION INFORMATION

Suitable extinguishing media: Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.



Hazardous combustion products: In the event of fire the following may be released: Carbon monoxide (CO), Nitrogen oxides (NO_x), Hydrogen chloride (HCl), Sulfur dioxide (SO₂)

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

Further information: Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Protective precautions: Avoid raising and breathing dust, and provide adequate ventilation.

Protective equipment and emergency procedures: As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

Environmental precautions: Take steps to avoid release into the environment, if safe to do so.

Method for cleaning up: Use mechanical handling equipment. Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Handling: Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure.

Storage: Keep container tightly closed. Store in accordance with information listed on the product insert.



SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: No exposure limits have been established for this material

Engineering measures: Use assisted ventilation in enclosed spaces if needed, especially storage areas.

Personal protective equipment (PPE)

Respiratory protection: A combination particulate/ organic vapor respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits.

Skin protection: Where contact is likely, wear chemical-resistant gloves (such as barrier laminate or butyl rubber), coveralls, socks and chemical-resistant footwear.

Eye protection: Where eye contact is likely, use chemical splash goggles.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Red liquid

Odor: Characteristic

pH: 4.0-9.0

SECTION 10: STABILITY AND REACTIVITY INFORMATION

Chemical stability: Stable under normal conditions.

Conditions to avoid: Very high or low temperatures.

Hazardous decomposition: No decomposition products expected under normal conditions of use.

Incompatible materials: Store only in the original container

Hazardous reactions: Hazardous polymerization will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

For Tebuconazole tech:

Oral: Acute oral LD₅₀ for male rats 4000, female rats 1700, mice *c.* 3000 mg/kg.

Skin and eye: Acute percutaneous LD₅₀ for rats >5000 mg/kg (in physiological saline solution).

Non-irritating to skin; mild irritant to eyes (rabbits).

Inhalation: LC₅₀ (4 h) for rats 0.37 mg/l air (aerosol), >5.1 mg/l (dust).

For Thiamethoxam tech:

Oral: Acute oral LD₅₀ for rats 1563 mg/kg.

Skin and eye: Acute percutaneous LD₅₀ for rats >2000 mg/kg. Non-irritating to skin and eyes (rabbits). Not a skin sensitiser (guinea pigs).

Inhalation: LC₅₀ (4 h) for rats >3720 mg/m³.

SECTION 12: ECOLOGICAL INFORMATION

For Tebuconazole tech:

Birds: Acute oral LD₅₀ for male Japanese quail 4438, female Japanese quail 2912, bobwhite quail 1988 mg/kg b.w. Dietary LC₅₀ (5 d) for mallard ducks >4816, bobwhite quail >5000 mg/kg feed.

Fish: LC₅₀ (96 h, flow-through) for rainbow trout 4.4, bluegill sunfish 5.7 mg/l.

Daphnia: LC₅₀ (48 h, flow-through) 2.79 mg/l.

Algae: E_rC₅₀ (72 h, static) for *Pseudokirchneriella subcapitata* 3.80 mg/l.

Bees: LD₅₀ (48 h, oral) >83 µg/bee; (contact) >200 µg/bee.

Worms: Acute LC₅₀ (14 d) for *Eisenia foetida* 1381 mg/kg dry soil.

For Thiamethoxam tech:

Birds: Acute oral LD₅₀ for bobwhite quail 1552, mallard ducks 576 mg/kg. Dietary LC₅₀ for bobwhite quail and mallard ducks >5200 mg/kg.

Fish: LC₅₀ (96 h) for rainbow trout >100, bluegill sunfish >114, sheepshead minnows >111 mg/l.

Daphnia: EC₅₀ (48 h) >100 mg/l.



Algae: EC₅₀ (96 h) for green algae >100 mg/l.

Bees: LD₅₀ for honeybees (oral) 0.005 µg/bee; (contact) 0.024 µg/bee.

Worms: LC₅₀ (14 d) for *Eisenia foetida* >1000 mg/kg soil.

SECTION 13: DISPOSAL CONSIDERATIONS

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. 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.

SECTION 14: TRANSPORT INFORMATION

Not available. Do not transport with foodstuff.

SECTION 15: REGULATORY INFORMATION

Safety phrase(s):

S2: Keep out of the reach of children.

S13: Keep away from food, drink and animal feeding stuffs.

S35: This material and its container must be disposed of in a safe way.

S36/37: Wear suitable protective clothing and gloves.

S57: Use appropriate container to avoid environmental contamination.

SECTION 16: OTHER INFORMATION

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or for processes other than those specifically described herein.

