
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Tebuconazole 250g/L EW
CAS-No. : 107534-96-3

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Fungicide

1.3 Details of the supplier of the safety data sheet

Company : Advantage Crop Protection Inc.
620 4th Avenue East
Regina Saskatchewan
S4N 4Z5
Canada

Telephone : 1 888 931 2530
Email : info@acpi.ag

1.4 Emergency telephone number

Emergency Phone # : Canutec 1-613-996-6666

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302
Reproductive toxicity (Category 2), H361d
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word : Warning

Hazard statement(s)

H302 : Harmful if swallowed.
H361d : Suspected of damaging the unborn child.
H411 : Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 : Avoid release to the environment.
P281 : Use personal protective equipment as required.

Supplemental Hazard Statements

2.3 Other hazards

none

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : 1-(4-Chlorophenyl)-4,4-dimethyl-3-(1H-1,2,4-triazol-1-ylmethyl)-3-pentanol

Formula : C₁₆H₂₂ClN₃O

Molecular weight : 307.82

Component	CAS No.	Concentration (w/v, %)
Tebuconazole	107534-96-3	25.0
Rhodiasolv ADMA 10	14433-76-2	48.2
Alkamuls OR/36	61791-12-6	20.0
Soprophor BSU	99734-09-5	3.0
Water	7732-18-5	3.0

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO_x), Hydrogen chloride gas

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	liquid
b) Color	light yellow
c) Odour	odorless
d) pH	6.37 at 25±0.5 °C
e) Melting point/	105°C (TC)
f) Flash point	> 100.00 °C (TC)
g) Vapour pressure	1.7 × 10 ⁻³ mPa (20 °C) (OECD 104)
h) Density	0.9804gg/mL
i) Pourability	1.05%
j) Wet sieve test	0.0%
k) Persistent foam	22mL after 1 min
l) Emulsion stability	uniform after 24h
m) Oxidation/reduction	compatible
n) Storage stability	stable

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable to elevated temperatures

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Conditions to avoid

No data available

10.4 Incompatible materials

Strong oxidizing agents

10.5 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO_x), Hydrogen chloride gas

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat ->5000mg/kg

LD50 Dermal - Rat - > 5000 mg/kg

LC50 Inhalation - Rat - 4 h - > 5000mg/m³

Skin corrosion/irritation

Skin – Rabbit No skin irritation

Serious eye damage/eye irritation

Eyes – Rabbit No eye irritation

Respiratory or skin sensitisation

No data available

The following information is for the active ingredient tebuconazole.

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Suspected human reproductive toxicant

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information

The following information is for the active ingredient tebuconazole.

12.1 Toxicity

Toxicity to fish LC50 - Carassius auratus (goldfish) - 8.7 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 11.8 mg/l - 48 h

Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - 5.3 mg/l - 72 h

Persistence and degradability

Biodegradability

12.2 Bioaccumulative potential

In rats, after three days, elimination was almost complete (>99% of the recovered dose). Tebuconazole was excreted with the urine and the faeces. In lactating goats and laying hens, tebuconazole was mainly metabolised via hydroxylation and conjugation. Plants Metabolism studies in representative crops show that tebuconazole is the major terminal residue in grapes and peanut and cereal straw. In cereal grains, triazole alanine is the main metabolite (similar to the metabolism of other parent triazoles). In plant tissue, mean DT50 in the range 7–12 d could be derived (cereals), depending on the data base taken.

12.3 Mobility in soil

The degradation of tebuconazole in soil was slow. Under field conditions, the compound degraded much more rapidly, and did not accumulate in long-term studies (3–5 y). Since no residues could be detected in deeper soil layers of these and other studies, and adsorption/desorption 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 4–6 w. Low vapour pressure and strong adsorption result in low volatilization into the air.

12.4 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.5 Other adverse effects

Toxic to aquatic life with long lasting effects.

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 3082

IMDG: 3082

IATA: 3082

14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tebuconazole 250g/L EW)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tebuconazole 250g/L EW)

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tebuconazole 250g/L EW)

14.3 Transport hazard class (es)

ADR/RID: 9

IMDG: 9

IATA: 9

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: no

IATA: yes

14.6 Special precautions for user

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2.

H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child.
H411	Toxic to aquatic life with long lasting effects.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Advantage Crop Protection Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.