

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

1.1. Product identifier

Product name:	TANTO
Product type:	Suspension concentrate (SC) containing 430 g/L (39.81% w/w) tebuconazole
MAPP number:	21139
Originator product:	Toledo® (Albaugh UK Ltd, MAPP 20616)

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

Use of substance / mixture:	Plant Protection Product – Fungicide. For professional use in winter and spring crops of wheat (excluding durum), triticale, barley, oats, rye, oilseed rape, cabbage, swedes, carrots, parsnips, horseradish, field beans and turnips.
Uses advised against:	Any use not specified on the product label. Must not be applied via hand-held equipment.

1.3. Details of the supplier of the safety data sheet

Authorisation holder / Supplier:	Gemini Agriculture Limited 71-75 Shelton Street, Covent Garden London WC2H 9JQ, United Kingdom Tel: +44 (0)20 3011 5515 Web: geminiag.com
Contact e-mail:	sales@geminiag.com

1.4. Emergency telephone number

Company 24h emergency line:	+44 (0)845 8698756 Technical helpline: +44 (0)845 564 6959
UK medical emergency:	NHS 111 (England, Scotland, Wales) / 999 in life-threatening emergency. UK National Poisons Information Service (health professionals only): 0344 892 0111.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under GB CLP:	Repr. 2: H361d; Aquatic Acute 1: H400; Aquatic Chronic 1: H410
Most important adverse effects:	Suspected of damaging the unborn child. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Signal word:	Warning
Hazard pictograms:	GHS08: Health hazard GHS09: Environment
Hazard statements:	H361d: Suspected of damaging the unborn child. H410: Very toxic to aquatic life with long lasting effects.
Precautionary statements:	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P280: Wear protective gloves/protective clothing/eye protection/face protection. P308+P313: IF exposed or concerned: Get medical advice/attention. P391: Collect spillage. P405: Store locked up. P501: Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
Supplemental:	EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

2.3. Other hazards

- PBT / vPvB:** This 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.
- Endocrine disruptors:** Tebuconazole is listed as a candidate for endocrine-disrupting properties under Regulation (EU) 2018/605 (criteria for identification of endocrine disruptors in plant protection products). This is currently under regulatory review.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Chemical nature: Crop protection product, fungicide, suspension concentrate (SC)

Hazardous ingredients:

Chemical name	CAS-No.	EC / Index No.	Classification	% w/w
Tebuconazole (ISO); (RS)-1-p-chlorophenyl-4,4-dimethyl-3-(1H-1,2,4-triazol-1-ylmethyl)pentan-3-ol	107534-96-3	EC 403-640-2 / Index 603-197-00-7	Acute Tox. 4 (oral): H302; Repr. 2: H361d; Aquatic Acute 1: H400 (M=1); Aquatic Chronic 1: H410 (M=1)	39.81%

For explanation of abbreviations and full text of H-statements referenced above, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

- General advice:** Show this safety data sheet to the doctor in attendance.
- If inhaled:** Remove to fresh air. Keep patient calm. Seek medical attention if symptoms develop.
- Skin contact:** Take off contaminated clothing. Wash skin with soap and water. Seek medical attention if irritation develops or persists.
- Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
- Ingestion:** Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms:** May cause redness and tearing of the eyes. Harmful if swallowed (based on component data). Repeated or prolonged exposure of pregnant workers is a concern in view of the Repr. 2 classification.

4.3. Indication of any immediate medical attention and special treatment needed

- Note to physicians:** Treat symptomatically. No specific antidote known.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use extinguishing measures appropriate to local circumstances and the surrounding environment. For large fires, use of water spray may be inefficient — prefer alcohol-resistant foam, dry chemical or CO₂.

Unsuitable extinguishing media: Do not scatter spilled material with high-pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards: In fire conditions, hazardous decomposition products may include carbon oxides, nitrogen oxides (NO_x), hydrogen chloride and hydrocyanic acid (HCN). Contain fire-fighting water — do not allow to enter drains or watercourses.

5.3. Advice for fire-fighters

Special protective equipment: Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid contact with skin, eyes or clothing. Use personal protective equipment as required (see Section 8). Pregnant workers should not be involved in clean-up because of the Repr. 2 classification.

6.2. Environmental precautions

Environmental precautions: VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. Prevent spread. Do NOT allow to enter drains, watercourses or the ground. If the product contaminates rivers, lakes or drains, inform the Environment Agency (or SEPA/NRW/NIEA as appropriate).

6.3. Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so. Dike large spills.

Methods for cleaning up: Absorb with inert absorbent (sand, sawdust, kieselguhr, universal binder). Pick up and transfer to properly labelled containers for disposal. Clean contaminated surfaces thoroughly with water and detergent.

6.4. Reference to other sections

Reference: See Sections 8, 12 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands and exposed skin before meals and after work. Persons susceptible to allergic reactions should not handle this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up. Protect from frost. Segregate from foods, drinks and animal feedingstuffs.

7.3. Specific end use(s)

Specific use(s): Plant protection product subject to Regulation (EC) No 1107/2009 as retained in GB law. Use in accordance with the product label and the Code of Practice for Using Plant Protection Products.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Occupational exposure limits: No specific UK Workplace Exposure Limit (WEL, HSE EH40) is assigned to tebuconazole or the mixture. Apply good industrial hygiene principles.

8.2. Exposure controls

Engineering measures: Provide adequate ventilation. Showers and eyewash stations should be available in the work area. Use local exhaust ventilation where necessary.

Eye/face protection: Safety glasses with side-shields conforming to EN 166 where splashes are likely.

Hand protection: Chemical-resistant safety gloves (EN ISO 374-1). Recommended: nitrile rubber (min. 0.4 mm) or neoprene rubber (min. 0.5 mm). Confirm suitability with the glove supplier.

Skin/body protection: Wear suitable protective clothing (coveralls). Change and wash contaminated clothing before reuse.

Respiratory protection: None required under normal use conditions. If exposure limits are exceeded or irritation is experienced, use an approved filtering half-mask (EN 149 FFP2/FFP3) or combination filter (EN 14387 type A2P3).

Special precautions – workers of childbearing potential: Because of the Repr. 2 classification of tebuconazole, employers should ensure a suitable and sufficient risk assessment is in place (Management of Health and Safety at Work Regulations 1999, Regulation 16). Pregnant and breastfeeding workers should not handle or be exposed to this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid (suspension concentrate)

Appearance: Opaque

Colour: Cream to light beige

Odour: Slight, aromatic

Odour threshold: Not determined

pH: 6.5 – 8.5 (undiluted)

Melting/freezing point: Not applicable (liquid). Store above 0 °C to protect from frost.

Initial boiling point: > 95 °C (of water phase)

Flash point: > 100 °C

Evaporation rate: Not determined

Flammability: Not flammable

Upper/lower flammability limits: Not applicable

Vapour pressure (tebuconazole): ~ 1.3 × 10⁻⁶ Pa at 20 °C

Vapour density: Not determined

Density: ~ 1.10 g/cm³ at 20 °C

Solubility in water: Dispersible

Partition coefficient log Pow (tebuconazole): 3.7

Auto-ignition temperature: Not determined

Decomposition temperature: Not determined

Viscosity (dynamic): ~ 400 mPa·s at 20 °C
Explosive properties: Not explosive
Oxidising properties: Not oxidising

9.2. Other information

VOC content: Not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity: No hazardous reactions if stored and handled as prescribed.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: None under normal processing.

10.4. Conditions to avoid

Conditions to avoid: Extreme heat. Freezing. Direct sunlight.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids and bases.

10.6. Hazardous decomposition products

Decomposition products: None known under recommended storage conditions. See Section 5.2 for combustion products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product-level acute toxicity (calculated per GHS Chapter 3.1):

Route	Endpoint	Value	Assessment
Oral (ATEmix)	-	500 mg/kg	Acute Tox. 4 (H302) applies at concentrated product level
Dermal (ATEmix)	-	5,005 mg/kg	Not classified

Component data (tebuconazole):

Route	Species	Type	Value
Oral	Rat	LD50	3,352 mg/kg
Dermal	Rat	LD50	> 5,000 mg/kg
Inhalation (4 h)	Rat	LC50	> 5,093 mg/m ³

Skin corrosion/irritation: May cause skin irritation. Not classified as a corrosive.

Serious eye damage/irritation: Causes eye irritation. May cause redness, itching and pain.

Respiratory or skin sensitisation: No indication of sensitisation potential.

Germ cell mutagenicity:	No evidence of mutagenic potential in in-vitro and in-vivo studies with tebuconazole.
Carcinogenicity:	Not classified as a carcinogen. Tebuconazole has caused liver tumours in mice at high doses via a rodent-specific mechanism with no relevance to humans.
Reproductive toxicity:	Classification: Repr. 2 (H361d) — Suspected of damaging the unborn child. Based on developmental toxicity observations in laboratory animal studies with tebuconazole.
STOT – single exposure:	No information available.
STOT – repeated exposure:	No information available.
Aspiration hazard:	Not applicable for the product as supplied.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity: Very toxic to aquatic life with long lasting effects. Toxic to aquatic life.

Component data (tebuconazole):

Organism	Species	Duration	Endpoint	Value
Fish	Oncorhynchus mykiss (rainbow trout)	96 h	LC50	4.4 mg/l
Aquatic invertebrates	Daphnia magna	48 h	EC50	2.79 mg/l
Algae	Pseudokirchneriella subcapitata	72 h	ErC50	1.96 mg/l
Sediment organism	Chironomus riparius	28 d	NOEC	0.29 mg/l

12.2. Persistence and degradability

Assessment: Tebuconazole is not readily biodegradable. Persistent in soil under aerobic conditions (DT50 typically 30-100 days).

12.3. Bioaccumulative potential

Assessment: Tebuconazole: log Pow 3.7, BCF ~50. Low potential for bioaccumulation.

12.4. Mobility in soil

Assessment: Tebuconazole: Koc ~1,000 (medium mobility). Adsorbs to organic soil components.

12.5. Results of PBT and vPvB assessment

Assessment: The mixture does not contain a substance fulfilling PBT or vPvB criteria. Tebuconazole is a candidate for endocrine-disruption assessment under Regulation (EU) 2018/605 — this is under regulatory review.

12.6. Other adverse effects

Other effects: The mixture does not contain substances listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product: Dispose of contents to a licensed hazardous-waste disposal contractor or collection site in accordance with the Hazardous Waste Regulations 2005 (as amended) and local requirements. Do NOT discharge into drains, watercourses or the ground.

Contaminated packaging: Do not re-use empty containers. Triple-rinse and add rinsate to the spray tank. Empty, triple-rinsed containers may be treated as non-hazardous waste.

European Waste Code (indicative): 02 01 08* – agrochemical waste containing dangerous substances. 15 01 10* – packaging containing residues of dangerous substances.

SECTION 14: Transport information

14.1. UN number

ADR / RID / IMDG / IATA / ICAO: UN 3082

14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tebuconazole)

14.3. Transport hazard class(es)

Class: 9 – Miscellaneous dangerous substances

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant (IMDG): Yes

14.6. Special precautions for user

IMDG EmS: F-A, S-F

IMDG Special Provisions: 274, 335, 969

IATA Special Provisions: A97, A158, A197

Tunnel code (ADR): (E)

Small-package exemption: May be shipped as non-dangerous in single/inner packagings ≤ 5 L for liquids under IMDG 2.10.2.7, IATA A197 and ADR/RID SP 375.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Bulk transport: Not applicable for the product as supplied.

SECTION 15: Regulatory information

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

GB Plant Protection Products Regulation: Regulation (EC) No 1107/2009 as retained in GB law. Authorised for professional use in Great Britain under MAPP 21139.

GB CLP: Regulation (EC) No 1272/2008 as retained in GB law (UK SI 2019/720 and UK SI 2020/1567).

UK REACH: Regulation (EC) No 1907/2006 as retained in UK law (UK SI 2019/758 and UK SI 2020/1577).

COSHH: The Control of Substances Hazardous to Health Regulations 2002 (as amended) apply to use of this product at work.

MHSW Regulations 1999: Regulation 16 – Risk assessment in respect of new or expectant mothers. Because tebuconazole is Repr. 2, employers must assess and control any risk to pregnant workers.

Seveso III / COMAH: Seveso III Directive 2012/18/EU – list entry E1 (hazardous to the aquatic environment). May be subject to COMAH Regulations 2015 above specified threshold quantities.

15.2. Chemical Safety Assessment

CSA: A Chemical Safety Assessment is not required for the active substance when used in specified plant protection applications. The mixture is evaluated within the framework of Regulation (EC) No 1107/2009 as retained in GB law.

SECTION 16: Other information

Revision

This revision: Revision 1.0 — issued 22/07/2026.
Reason for issue: New SDS drafted under the harmonised Sigrun / Gemini SDS template following the update of the originator Toledo® 250 EW SDS (Albaugh LLC, 15-Aug-2024) and confirmation of the mixture classification on the UK Toledo® label (MAPP 20616, print 05-03-2024).

Full text of H- and P-statements referenced in Sections 2 and 3

Hazard statements: H302: Harmful if swallowed.
H361d: Suspected of damaging the unborn child.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

Abbreviations

Abbreviations: ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate. ATEmix: calculated ATE for a mixture.
BCF: Bioconcentration Factor.
CLP: Classification, Labelling and Packaging Regulation (EC) No 1272/2008.
COSHH: Control of Substances Hazardous to Health Regulations.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
MAPP: Ministerially Approved Plant Protection product number.
PBT / vPvB: Persistent, Bioaccumulative and Toxic / very Persistent and very Bioaccumulative.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals.
SC: Suspension concentrate.
STOT: Specific Target Organ Toxicity.
WEL: Workplace Exposure Limit (HSE EH40).

Data sources

Sources: Classification data derived from the originator Toledo® 250 EW Safety Data Sheet (Albaugh LLC, product code 33719, revision date 15-Aug-2024) and the current UK Toledo® 430 g/L SC product label (MAPP 20616, print AUK-UK_Toledo_LBL_05-03-24). Component data for tebuconazole from the European Food Safety Authority (EFSA) peer review and REACH registration dossier.

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