

# SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 TEBUCONAZOLE EC 250 G U-EU

Version 5 / EU 102000010952 1/11 Revision Date: 02.12.2020 Print Date: 01.06.2021

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier		
Trade name	TEBUCONAZOLE EC 250 G U-EU	
Product code (UVP)	06397239	
1.2 Relevant identified uses of	of the substance or mixture and uses advised against	
Use	Fungicide	
1.3 Details of the supplier of the supplicit states and the supplicit states are supplied as the supplicit states are supplicit. The supplicit states are supplicit states are supplicit states are supplicit states are supplicit. The supplicit states are supplicit states are supplicit states are supplicit states are supplicit. The supplicit states are supplicit states are supplicit states are supplicit. The supplicit states are supplicit states are supplicit states are supplicit. The supplicit states are supplicit states are supplicit. The supplicit states are supplicit states are supplicit states are supplicit. The supplicit states are supplicit states are supplicit states are supplicit. The supplicit states are supplicit states are supplicit. The supplicit state	the safety data sheet	
Supplier	Liad Agro Ltd, West Ind. Zone, 3 Amal St. Beth Shemesh Israel 9910302 (Bayer AG, Kaiser-Wilhelm-Allee 1 51373 Leverkusen Germany)	
Telefax	+972(2)9913145	
Responsible Department	Substance Classification & Registration +49(0)2173-38-3409 (during business hours only) Email: BCS-SDS@bayer.com	
1.4 Emergency telephone no. Emergency telephone no.	For emergencies in hazardous materials incidents, call Hotline 100 or 102. The Environmental Hotline of the Ministry of Environmental Protection is at your disposal 24 hours a day for urgent environmental reports. Tel: 073-2733200 or: 6911 *	

# **SECTION 2: HAZARDS IDENTIFICATION**

# 2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Acute toxicity: Category 4 H302 Harmful if swallowed. Acute toxicity: Category 4 Harmful if inhaled. H332 Skin sensitisation: Category 1 H317 May cause an allergic skin reaction. Eye irritation: Category 2 Causes serious eye irritation. H319 Specific target organ toxicity - single exposure: Category 3 H335 May cause respiratory irritation. Reproductive toxicity: Category 2 Suspected of damaging the unborn child. H361d

Acute aquatic toxicity: Category 1 H400 Very toxic to aquatic life.



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Chronic aquatic toxicity: Category 1 H410 Very toxic to aquatic life with long lasting effects.

# 2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Tebuconazole
- N,N-Dimethyl decanamide



# Signal word: Danger

# Hazard statements

H302 + H332	Harmful if swallowed or if inhaled. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. Suspected of damaging the unborn child. Very toxic to aquatic life with long lasting effects. To avoid risks to human health and the environment, comply with the instructions for use.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H361d	Suspected of damaging the unborn child.
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.

#### **Precautionary statements**

I	P280	Wear protective gloves/ protective clothing/ eye protection/ face protection. If eye irritation persists: Get medical advice/ attention. Collect spillage. Dispose of contents/container in accordance with local regulation.
I	P337 + P313	If eye irritation persists: Get medical advice/ attention.
I	P391	Collect spillage.
	P501	Dispose of contents/container in accordance with local regulation.

# 2.3 Other hazards

No other hazards known.

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

#### **Chemical nature**

Emulsifiable concentrate (EC) Tebuconazole 250 g/l

#### Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. /	Classification	Conc. [%]
	EC-No. /	REGULATION (EC) No	
	REACH Reg. No.	1272/2008	
Tebuconazole	107534-96-3	Acute Tox. 4, H302	25,9



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	403-640-2	Repr. 2, H361d Aquatic Acute 1, H400 Aquatic Chronic 1, H410	
N,N-Dimethyl decanamide	14433-76-2 238-405-1 01-2119485027-36-XXXX	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 3, H412	> 20

### Further information

Tebuconazole	107534-96-3	M-Factor: 1 (acute), 10 (chronic)

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

# **SECTION 4: FIRST AID MEASURES**

## 4.1 Description of first aid measures

General advice	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.	
Inhalation	Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.	
Skin contact	Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.	
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. If eye irritation or redness persists, see an ophthalmologist.	
Ingestion	Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.	
4.2 Most important symptoms and effects, both acute and delayed		
Symptoms	No symptoms known or expected.	
4.3 Indication of any immediate medical attention and special treatment needed		
Treatment	Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.	

# **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1 Extinguishing media

Suitable

Water spray, Carbon dioxide (CO2), Foam, Sand



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5.2 Special hazards arising from the substance or mixture	In the event of fire the following may be released:, Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Nitrogen oxides (NOx), Sulphur oxides
5.3 Advice for firefighters	
Special protective equipment for firefighters	In the event of fire and/or explosion do not breathe fumes. 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**

6.1 Personal precautions, protective equipment and emergency procedures		
Precautions	Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.	
6.2 Environmental precautions	Do not allow to get into surface water, drains and ground water.	
6.3 Methods and materials for containment and cleaning up		
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.	
6.4 Reference to other sections	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.	

# SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Advice on safe handling	Use only in area provided with appropriate exhaust ventilation.
Hygiene measures	Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

# 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep away from direct sunlight.
Advice on common storage	Keep away from food, drink and animal feedingstuffs.
Suitable materials	HDPE (high density polyethylene)



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7.3 Specific end use(s) Refer to the label and/or leaflet.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

CAS-No.	Control parameters	Update	Basis
107534-96-3	0,2 mg/m3 (SK-ABS)		OES BCS*
			107534-96-3 0,2 mg/m3

\*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

#### 8.2 Exposure controls

### Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection	Wear respirator with an org (protection factor 10) confo Respiratory protection shou short duration activities, wh been taken to reduce expos	not enclosed, and if contact may occur: anic vapours and gas filter mask rming to EN140 type A or equivalent. Ild only be used to control residual risk of en all reasonably practicable steps have sure at source e.g. containment and/or vays follow respirator manufacturer's ing and maintenance.
Hand protection	breakthrough time which an Also take into consideration the product is used, such as contact time. Wash gloves when contami inside, when perforated or w	ions regarding permeability and e provided by the supplier of the gloves. In the specific local conditions under which is the danger of cuts, abrasion, and the inated. Dispose of when contaminated when contamination on the outside cannot requently and always before eating, the toilet. Nitrile rubber > 480 min > 0,4 mm Protective gloves complying with EN 374.
Eye protection	Wear goggles (conforming	to EN166, Field of Use = 5 or equivalent).
Skin and body protection	Wear standard coveralls and Category 3 Type 3 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.	
General protective measures	If product is handled while r Complete suit protecting ag	not enclosed, and if contact may occur: jainst chemicals



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# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

Form	Liquid, clear
Colour	yellow
Odour	amine-like, of ammonia
Odour Threshold	No data available
рН	5,0 - 7,5 (1 %) (23 °C) (deionized water)
Melting point/range	No data available
Boiling Point	No data available
Flash point	152 °C
Flammability	No data available
Auto-ignition temperature	345 °C
Ignition temperature	345 °C
Minimum ignition energy	No data available
Self-accelarating decomposition temperature (SADT)	No data available
Upper explosion limit	No data available
Lower explosion limit	No data available
Vapour pressure	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Relative density	No data available
Density	ca. 0,96 g/cm³ (20 °C)
Water solubility	No data available
Partition coefficient: n- octanol/water	Tebuconazole: log Pow: 3,7
Viscosity, dynamic	32,2 mPa.s (20 °C)
Viscosity, kinematic	No data available
Surface tension	29 mN/m
Impact sensitivity	Not impact sensitive.
Oxidizing properties	No data available
Explosivity	Not explosive 92/69/EEC, A.14 / OECD 113
9.2 Other information	Further safety related physical-chemical data are not known.



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# SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	
Thermal decomposition	170 - 300 °C, Heating rate: 3 K/min, Decomposition energy: 90 kJ/kg Exothermic decomposition.
10.2 Chemical stability	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions. Stable under recommended storage conditions.
10.4 Conditions to avoid	Extremes of temperature and direct sunlight.
10.5 Incompatible materials	Store only in the original container.
10.6 Hazardous decomposition products	No decomposition products expected under normal conditions of use.

# SECTION 11: TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

Acute oral toxicity	LD50 (Rat) 500 - < 1.000 mg/kg
Acute inhalation toxicity	LC50 (Rat) ca. 3,201 mg/l Exposure time: 4 h
Acute dermal toxicity	LD50 (Rat) > 4.000 mg/kg
Skin corrosion/irritation	No skin irritation (Rabbit)
Serious eye damage/eye irritation	Irritating to eyes. (Rabbit)
Respiratory or skin sensitisation	Skin: Sensitising (Guinea pig) OECD Test Guideline 406, Magnusson & Kligman test

# Assessment STOT Specific target organ toxicity - single exposure

Tebuconazole: Based on available data, the classification criteria are not met.

## Assessment STOT Specific target organ toxicity – repeated exposure

Tebuconazole did not cause specific target organ toxicity in experimental animal studies.

#### Assessment mutagenicity

Tebuconazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

# Assessment carcinogenicity

Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Liver. The mechanism of tumour formation is not considered to be relevant to man.

# Assessment toxicity to reproduction

Tebuconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Tebuconazole is related to parental toxicity.



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## Assessment developmental toxicity

Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations.

#### **Aspiration hazard**

Based on available data, the classification criteria are not met.

#### **Further information**

Irritating to respiratory system.

# **SECTION 12: ECOLOGICAL INFORMATION**

12.1 Toxicity		
Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 9,28 mg/l Exposure time: 96 h	
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 7,3 mg/l Exposure time: 48 h	
Chronic toxicity to aquatic invertebrates	NOEC (Daphnia (water flea)): 0,010 mg/l Exposure time: 21 d The value mentioned relates to the active ingredient tebuconazole.	
Toxicity to aquatic plants	EC50 (Raphidocelis subcapitata (freshwater green alga)) 3,51 mg/l Growth rate; Exposure time: 72 h	
	(Lemna gibba (gibbous duckweed)) 0,237 mg/l Growth rate; Exposure time: 7 d The value mentioned relates to the active ingredient tebuconazole.	
12.2 Persistence and degradability		
Biodegradability	Tebuconazole: Not rapidly biodegradable	
Кос	Tebuconazole: Koc: 769	
12.3 Bioaccumulative potential		
Bioaccumulation	Tebuconazole: Bioconcentration factor (BCF) 35 - 59 Does not bioaccumulate.	
12.4 Mobility in soil		
Mobility in soil	Tebuconazole: Slightly mobile in soils	
12.5 Results of PBT and vPvB assessment		
PBT and vPvB assessment	Tebuconazole: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).	
12.6 Other adverse effects		
Additional ecological information	No other effects to be mentioned.	



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# **SECTION 13: DISPOSAL CONSIDERATIONS**

# 13.1 Waste treatment methods

Product	In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.
Contaminated packaging	Not completely emptied packagings should be disposed of as hazardous waste.
Waste key for the unused product	02 01 08* agrochemical waste containing hazardous substances

# **SECTION 14: TRANSPORT INFORMATION**

#### ADR/RID/ADN

IMDG

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
	N.O.S.
	(TEBUCONAZOLE SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packaging Group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90
Tunnel Code	-

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG	
14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOLE SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packaging Group	III
14.5 Marine pollutant	YES
ΙΑΤΑ	
14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(TEBUCONAZOLE SOLUTION )
14.3 Transport hazard class(es) 14.4 Packaging Group	9
14.5 Environm. Hazardous Mark	YES

## 14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.



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#### **14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code** No transport in bulk according to the IBC Code.

# **SECTION 15: REGULATORY INFORMATION**

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

# **Further information**

WHO-classification: II (Moderately hazardous)

### 15.2 Chemical safety assessment

A chemical safety assessment is not required.

# **SECTION 16: OTHER INFORMATION**

### Text of the hazard statements mentioned in Section 3

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

# Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous
	Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified



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NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2015/830 amending Regulation (EU) No 1907/2006 and any subsequent amendments. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

#### **Reason for Revision:**

The following sections have been revised: Section 2: Hazards Identification. Section 3: Composition / Information on Ingredients.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.