

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

Product name : TOLEDO®
 Product code : FF-020 - Tebuconazole 430g/l SC -

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

Main use category : Professional use
 Use of the substance/preparation : Fungicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Rotam Europe Ltd
 Hamilton House, Mabledon Place
 London WC1H 9BB
 United Kingdom
 Tel : +44 020 7953 0447
msds@rotam.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS Direct (England and Wales)		111	
United Kingdom	NHS 24 (Scotland)		111	

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]

Repr. 2 H361d
 Aquatic Chronic 1 H410

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

GHS09

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H361d - Suspected of damaging the unborn child.
 H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P281 - Use personal protective equipment as required.
 P308+P313 - IF exposed or concerned: Get medical advice/attention.
 P391 - Collect spillage.
 P405 - Obtain special instructions before use.
 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.

EUH phrases : EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

PPP safety precautions : SP 1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads)
 SPe3 - To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies

in line with LERAP requirements.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tebuconazole	(CAS No.) 107534-96-3 (EC no) 403-640-2 (EC index no) 603-197-00-7	39.81	Acute Tox. 4 (Oral), H302 Repr. 2, H361d Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Aqueous preparation of isothiazolinones		0 - 1	Skin Corr. 1B, H314 Eye Dam.1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411 Aquatic Acute 1, H400

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Call a poison center or a doctor if you feel unwell.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
- First-aid measures after skin contact : Rinse immediately with plenty of water. In case of an skin reaction, consult a physician.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Do NOT induce vomiting. Obtain emergency medical attention.

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
- Unsuitable extinguishing media : High volume water jet.

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NOx).

5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel. Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.
- Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe spray, vapours. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

7.3. Specific end use(s)

See the label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Engineering control of operator exposure must be used where reasonably practicable.

Hand protection:

Protective gloves

Eye protection:

Face protection (faceshield)

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid - SC (Suspension concentrate)
Appearance	: White liquid
Colour	: White
Odour	: No characteristic odour
Odour threshold	: No data available
pH	: 7.7 (1% dilution) (CIPAC MT 75.2)
Melting point	: No data available
Solidification point	: No data available
Boiling point	: No data available
Flash point	: Not measurable (EEC A9)
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Irrelevant, the mixture is a liquid
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.094 (EEC A3)
Solubility	: No data available
Log Pow	: Irrelevant, the product is a mixture
Log Kow	: Irrelevant, the product is a mixture
Self ignition temperature	: >500°C (ASTM E 659/78)
Decomposition temperature	: No data available
Viscosity, kinematic	: Irrelevant
Viscosity, dynamic	: 864 mPa.s @ 10 rpm - 193 mPa.s @ 100 rpm (OECD 114)

Explosive properties : The test item is unlikely to produce any risk of explosion (EEC A14)
 Oxidising properties : Not an oxidiser (EEC A21)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not applicable.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agent.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

TOLEDO®	
LD50 oral rat	> 5000 mg/kg (OECD Guidelines n°425)
LD50 dermal rat	> 5050 mg/kg (OECD Guidelines n°402)
LC50 inhalation rat (mg/l)	> 5.13 mg/l (4h) (OECD Guidelines n°403)
Skin corrosion/irritation	: Non irritating for the skin (OECD Guidelines n°40, rabbit)
Serious eye damage/irritation	: Non irritating for the eyes (OECD Guidelines n°405, rabbit)
Respiratory or skin sensitisation	: Non sensitising for the skin (OECD Guidelines n°406, guinea pig)
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Possible risk of harm to the unborn child (due to the classification of active substance tebuconazole)
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

TOLEDO®	
LC50(96h) fishes	24.62 mg/l (Danio rerio) OECD Guidelines n°203 16.3 mg/l (Oncorhynchus mykiss) OECD Guidelines n°203
EC50(48h) Daphnia 1	> 3.7 mg/l (Daphnia magna) OECD Guidelines n°202 10.00 mg/l (Daphnia similis) OECD Guidelines n°202
EyC50(72h) algae	7.34 mg/l (Pseudokirchnerella subcapita) OECD Guidelines n°201
NOErC (72h) algae	6.87 mg/l (Pseudokirchnerella subcapita) OECD Guidelines n°201
EyC50 (7 days) other aquatic plants	1.65 mg/l (Lemna minor L.) OECD Guidelines n°221
NOErC (7 days) other aquatic plants	0.05 mg/l (Lemna minor L.) OECD Guidelines n°221

12.2. Persistence and degradability

Tebuconazole (CAS No.) 107534-96-3	
Persistence and degradability	Not readily biodegradable

12.3. Bioaccumulative potential

Tebuconazole (CAS No.) 107534-96-3	
Log Pow	3.7 (EFSA Journal 2014; 12(1):3485)

12.4. Mobility in soil

Components	
Tebuconazole (CAS No.) 107534-96-3	Koc= 769 L/kg (Arithmetic mean), (<i>EFSA Journal</i> 2014; 12(1):3485)

12.5. Results of PBT and vPvB assessment

Components	
Tebuconazole (CAS No.) 107534-96-3	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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADN / ADR / IATA / IMDG / RID

14.1. UN number

UN-No. (ADR) : 3082
UN-No. (IMDG) : 3082
UN-No. (IATA) : 3082
UN-No. (ADN) : 3082
UN-No. (RID) : 3082

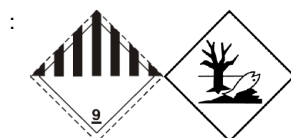
14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tebuconazole), 9, III, (E)
Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tebuconazole), 9, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Tebuconazole), 9, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tebuconazole), 9, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tebuconazole), 9, III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 9
Danger labels (ADR) : 9



IMDG

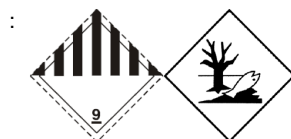
Transport hazard class(es) (IMDG) : 9
Danger labels (IMDG) : 9



IATA

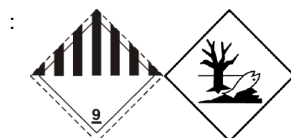
Transport hazard class(es) (IATA) : 9

Hazard labels (IATA) : 9

**ADN**

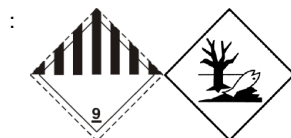
Transport hazard class(es) (ADN) : 9

Danger labels (ADN) : 9

**RID**

Transport hazard class(es) (RID) : 9

Danger labels (RID) : 9

**14.4. Packing group**

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

14.6. Special precautions for user**- Overland transport**

Classification code (ADR) : M6

Special provisions (ADR) : 274, 335, 601, 375

Limited quantities (ADR) : 5I

Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Special packing provisions (ADR) : PP1

Mixed packing provisions (ADR) : MP19

Portable tank and bulk container instructions (ADR) : T4

Portable tank and bulk container special provisions (ADR) : TP1, TP29

Tank code (ADR) : LGBV

Vehicle for tank carriage : AT

Transport category (ADR) : 3

Special provisions for carriage - Packages (ADR) : V12

Special provisions for carriage - Loading,
unloading and handling (ADR) : CV13
Hazard identification number (Kemler No.) : 90
Orange plates :



Tunnel restriction code (ADR) : E
EAC code : •3Z

- Transport by sea

Special provisions (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP2, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

- Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
Special provisions (IATA) : A97, A158, A197
ERG code (IATA) : 9L

- Inland waterway transport

Classification code (ADN) : M6
Special provisions (ADN) : 274, 335, 375, 601
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : M6
Special provisions (RID) : 274, 335, 375, 601
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions (RID) : TP1, TP29
Tank codes for RID tanks (RID) : LGBV
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31

Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90

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

Not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

No Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

The mixture is registered as a plant protection product according to Regulation (EC) No.1107 / 2009.

SECTION 16: Other information

This MSDS supersedes all previous editions.

TOLEDO® is a registered trademark of ROTAM.

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixturejs, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Full text of H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Repr. 2	Reproductive toxicity Category 2
Skin Corr. 1B	skin corrosion/irritation Category 1B
Skin Sens. 1	Skin sensitisation Category 1
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life
H410	Very Toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

SDS EU (REACH Annex II)

Disclaimer: The information provided by Rotam Europe Ltd contained herein is given in good faith and correct to the best of our knowledge. However, the information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.