

SAFETY DATA SHEET (SDS)

TITLE: **TEBUCONAZOLE +TRIFLOXYSTROBIN 750 WG**

1.0 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Product Name : CIBA TRIZOLE 750 WG
Common Name : Tebuconazole 50% + Trifloxystrobin 25% (WG)
CAS No. : 107534-96-3, 141517-21-7
Index No. : N/A

1.2 Relevant identified uses of the substance: Fungicide

1.3 Details of the Manufacturer / Supplier of the safety data sheet:

Supplier CIBA AGRIPHARMA SARL
78 Boulevard Haussmann
75008 Paris , France
Tel Tel: +33 6 51 39 90 00
E-mail administration@ciba- agripharma.com
Webpage www. ciba- agripharma.com

1.4 Emergency Phone Number (24 hours)

+33 6 51 39 90 00

2.0 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.

Eye irritation: Category 2

H319 Causes serious eye irritation.

Reproductive toxicity: Category 2

H361d Suspected of damaging the unborn child.

Acute aquatic toxicity: Category 1

H400 Very toxic to aquatic life.

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
- Trifloxystrobin



Signal word: Warning

Hazard statements

H319	Causes serious eye 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.
EUH208	Contains Trifloxystrobin. May produce an allergic reaction.

Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.
P501	Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site, except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

2.3 Other hazards

No other hazards known.

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Water dispersible granules (WG)
Trifloxystrobin/Tebuconazole 25:50 % w/w

Hazardous components

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

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification	Conc. [%]
		REGULATION (EC) No 1272/2008	
Trifloxystrobin	141517-21-7	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	25.00
Tebuconazole	107534-96-3 403-640-2	Acute Tox. 4, H302 Repr. 2, H361d Aquatic Acute 1, H400 Aquatic Chronic 1, H410	50.00
Alkylaryl sulfonate	91078-64-7 293-346-9 01-2119985167-25-XXXX	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	> 1.00 – < 25.00
Methylene-linked	90387-57-8	Aquatic Chronic 3, H412	> 1.00 – <
condensation product of arylsulphonic, sodium salts	291-331-1		25.00
Kaolin	1332-58-7 310-194-1	Not classified	> 1.00

Crystalline quartz (respirable)	14808-60-7 238-878-4		< 1
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Further information

Trifloxystrobin	141517-21-7	M-Factor: 100 (acute)
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.

4.0 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. Get medical attention if irritation develops and persists.
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.
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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. There is no specific antidote.
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5.0 FIRE – FIGHTING MEASURE

5.1 Extinguishing media

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

Unsuitable High volume water jet

5.2 Special hazards arising from the substance or mixture In the event of fire the following may be released: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Carbon monoxide (CO), Nitrogen oxides (NOx)

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.

6.0 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. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Use mechanical handling equipment. 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.

7.0 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	Aluminium composite film (min. 0,007 mm Aluminium)
7.3 Specific end use(s)	Refer to the label and/or leaflet.

8.0 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update
Trifloxystrobin	141517-21-7	2.7 mg/m ³ (SK-SEN)	
Tebuconazole	107534-96-3	0.2 mg/m ³ (SK-ABS)	
Kaolin (Respirable dust.)	1332-58-7	2.0 mg/m ³ (TWA)	2011
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.1 mg/m ³ (TWA)	2011

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

If product is handled while not enclosed, and if contact may occur:
Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent.
Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Material	Nitrile rubber
Rate of permeability	> 480 min
Glove thickness	> 0.4 mm

Protective index
Directive

Class 6
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 5 suit.
If there is a risk of significant exposure, consider a higher protective type 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.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form water-dispersible granules

Colour white to light beige

Odour weak, characteristic

pH 7.0 - 9.0 at 1 % (23 °C) (deionized water)

Flammability (solid, gas) The product is not highly flammable.

Auto-ignition temperature 280 °C

Bulk density ca. 0.55 g/ml (bulk density tapped)

Water solubility dispersible

Partition coefficient: n-octanol/water Tebuconazole: log Pow: 3.7
Trifloxystrobin: log Pow: 4.5 at 25 °C

Impact sensitivity Not impact sensitive.

Oxidizing properties No oxidizing properties

Explosivity Not explosive
92/69/EEC, A.14 / OECD 113

9.2 Other information Further safety related physical-chemical data are not known.

10.0 STABILITY AND RELIABILITY

10.1 Reactivity

Thermal decomposition Stable under normal conditions.

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.

- 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.

11.0 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	LD50 (Rat) \geq 5,000 mg/kg
Acute inhalation toxicity	Not relevant because of low dust formation.
Acute dermal toxicity	LD50 (Rat) > 2,000 mg/kg
Skin irritation	No skin irritation (Rabbit)
Eye irritation	Irritating to eyes. (Rabbit)
Sensitisation	Non-sensitizing. (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.
Trifloxystrobin: 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.
Trifloxystrobin 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.
Trifloxystrobin 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.
Trifloxystrobin was not carcinogenic in lifetime feeding studies in rats and mice.

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.
Trifloxystrobin 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 Trifloxystrobin is related to parental toxicity.

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.
Trifloxystrobin caused developmental toxicity only at dose levels toxic to the dams. The developmental

effects seen with Trifloxystrobin are related to maternal toxicity.

Aspiration hazard

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

12.0 ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)) 0.064 mg/l

Exposure time: 96 h

Toxicity to aquatic invertebrates

LC50 (Daphnia magna (Water flea)) 0.0138 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

13.0 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. It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines.

Contaminated packaging

Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Add washings to sprayer at time of filling. Dispose of empty and cleaned packaging safely. Follow advice on product label and/or leaflet.

Waste key for the unused product

02 01 08* agrochemical waste containing hazardous substances

14.0 TRANSPORT INFORMATION

ADR/RID/ADN

14.1 UN number	3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TEBUCONAZOLE, TRIFLOXYSTROBIN MIXTURE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90

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	3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TEBUCONAZOLE, TRIFLOXYSTROBIN MIXTURE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Marine pollutant	YES

IATA

14.1 UN number	3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TEBUCONAZOLE, TRIFLOXYSTROBIN MIXTURE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES

14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

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

No transport in bulk according to the IBC Code.

15.0 REGULATORY INFORMATION

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

Republic of Ireland Regulations

This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.

Supply and Use

European Communities (Prohibition of Certain Active Substances in Plant Protection Products) Regulations 1981 (SI No 320/1981)
European Communities (Authorization, Placing on the Market, Use and Control of Plant Protection Products) Regulations 2003 (SI No 83/2003)



European Communities (Classification, Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations 2001 (SI No 624/2001)
2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 (SI No 619/2001)

Waste Treatment

Landfill Directive
Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94)

Further information

WHO-classification: III (Slightly hazardous)

15.2 Chemical safety assessment

A chemical safety assessment is not required.

16.0 OTHER INFORMATION

The information contained herein relates only to the specified material identified. CIBA AGRIPHARMA, believes that such information is accurate and reliable as of the data of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. CIBA AGRIPHARMA urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.