

Material group	16I/1640	Page 1 of 15
Product name	FATHOM 1640, TEBUCONAZOLE 200 g/l EC	June 2018
Safety data sheet according to EU Reg. 1907/2006 as amended		Supersedes June 2017

SAFETY DATA SHEET FATHOM 1640, TEBUCONAZOLE 200 g/l EC

Revision: Sections containing a revision or new information are marked with a ♣.

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

- 1.1. **Product identifier** **FATHOM
1640, TEBUCONAZOLE 200 g/l EC
Contains tebuconazole**
- 1.2. **Relevant identified uses of the substance or mixture and uses advised against** Can be used as fungicide only.
- 1.3. **Details of the supplier of the safety data sheet** **CHEMINOVA A/S**, a subsidiary of FMC Corporation
Thyborønvej 78
DK-7673 Harboøre
Denmark
SDS.Ronland@fmc.com
- 1.4. **Emergency telephone number**
Company +45 97 83 53 53 (24 h; for emergencies only)

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Medical emergencies:

Austria: +43 1 406 43 43	Portugal: 808 250 143 (in Portugal only) +351 21 330 3284
Belgium: +32 70 245 245	Romania: +40 21318 3606
Bulgaria: +359 2 9154 409	Slovakia: +421 2 54 77 4 166
Cyprus: 1401	Slovenia: +386 41 650 500
Czech Republic: +420 224 919 293 +420 224 915 402	South Africa: +27 83 123 3911 (Bateleur Emergency Response Co.)
Denmark: +45 82 12 12 12	Spain: +34 91 562 04 20
France: +33 (0) 1 45 42 59 59	Sweden: +46 08-331231 112
Finland: +358 9 471 977	Switzerland: 145
Greece: 30 210 77 93 777	Turkey: 114
Hungary: +36 80 20 11 99	England & Wales - 111
Ireland (Republic): +353 1 809 2166	Healthcare professionals seeking poisons information should consult www.toxbase.org
Italy: +39 02 6610 1029	Scotland - 08454 24 24 24
Lithuania: +370 523 62052 +370 687 53378	Northern Ireland - Local GP or Pharmacist
Luxembourg: +352 8002 5500	Republic of Ireland - 01 837 9964
Netherlands: +31 30 274 88 88	U.S.A. & Canada: +1 800 / 331-3148 (ProPharma)
Norway: +47 22 591300	All other countries: +1 651 / 632-6793 (ProPharma - Collect).
Poland: +48 22 619 66 54 +48 22 619 08 97	

Transportation, warehousing & after
 sale incidents and emergencies
 Contact CHEMTREC help centre
 Dialling from the UK and NI
 0870 820 0418
 Dialling from Ireland
 01 901 4670

♣ SECTION 2: HAZARDS IDENTIFICATION

- 2.1. **Classification of the substance or mixture**
- Eye irritation: Category 2 (H319)
 Sensitisation – skin: Category 1B (H317)
 Toxic to reproduction: Category 2 (H361d)
 Hazards to the aquatic environment, chronic: Category 1 (H410)
- WHO classification Class U (Unlikely to present acute hazard in normal use)
- Health hazards The product may harm the unborn child. It may be mildly to moderately irritating to eyes and skin. Several other harmful effects are possible in case of massive or prolonged exposure. See section 11.
- Environmental hazards The product is toxic to aquatic organisms.
- 2.2. **Label elements**
- According to EU Reg. 1272/2008 as amended
- Product identifier 1640, Tebuconazole 200 g/l EC
 Contains tebuconazole

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Hazard pictograms (GHS07, GHS08, GHS09)



Signal word

Warning

Hazard statements

H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H361d Suspected of damaging the unborn child.
 H410 Very toxic to aquatic life with long lasting effects.

Supplementary hazard statement

EUH401 To avoid risks to human health and the environment, comply with the instructions of use.

Precautionary statements

P261 Avoid breathing vapours.
 P264 Wash hands thoroughly after handling.
 P280 Wear protective gloves, protective clothing and eye protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P501 Dispose of contents/container as hazardous waste.

2.3. **Other hazards**

None of the ingredients in the product meets the criteria for being PBT or vPvB.

♣ SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. **Substances**

The product is a mixture, not a substance.

3.2. **Mixtures**

See section 16 for full text of hazard statements.

Active ingredient

Tebuconazole

Content: 20% by weight

CAS name

1H-1,2,4-Triazole-1-ethanol, α -[2-(4-chlorophenyl)ethyl]- α -(1,1-dimethylethyl)-

CAS no.

107534-96-3

IUPAC name

(RS)-1-p-Chlorophenyl-4,4-dimethyl-3-(1H-1,2,4-triazol-1-ylmethyl)pentan-3-ol

ISO name/EU name

Tebuconazole

EC no. (ELINCS no.)

403-640-2

EU index no.

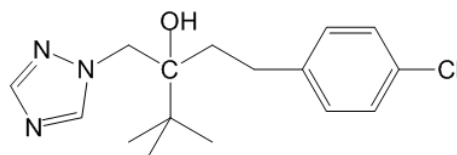
603-197-00-7

Classification of the ingredient

Acute oral toxicity: Category 4 (H302)
 Toxic to reproduction: Category 2 (H361d)
 Hazards to the aquatic environment, acute: Category 1 (H400)
 chronic: Category 1 (H410)

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Structural formula



Reportable ingredients

Reportable ingredients	Content (% w/w)	CAS no.	EC no. (EINECS no.)	Classification
Dimethyl sulphoxide Reg. no. 01-2119431362-50	20	67-68-5	200-664-3	None
Octan-1-ol Reg. no. 01-2119486978-10	16	111-87-5	203-917-6	Eye Irrit. 2 (H319)
Tristyrylphenyl-polyethyleneglycol-phosphoric acid	8	114535-82-9	None	Eye Irrit. 2 (H319)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. Reg. no. 01-2119490234-40	2	85536-14-7	287-494-3	Acute Tox. 4 (H302) Skin Corr. 1C (H314)

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation	If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.
Skin contact	Immediately remove contaminated clothing and footwear. Flush skin with much water. Wash with water and soap. See physician if irritation develops.
Eye contact	Immediately rinse eyes with much water or eyewash solution, occasionally opening eyelids, until no evidence of chemical remains. Remove contact lenses after a few minutes and rinse again. Get medical attention if irritation develops.
Ingestion	Let the exposed person rinse mouth and drink several glasses of water or milk, but not induce vomiting. If vomiting does occur, let him/her rinse mouth and drink several glasses of fluid again. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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

The first symptom to appear after skin or eye contact will be irritation. After ingestion, the main symptoms are passivity, impaired mobility and shortness of breath.

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

Immediate medical attention is required in case of ingestion.
 It may be helpful to show this safety data sheet to physician.

A specific antidote for exposure to this material is not known. If swallowed, gastric lavage and/or administration of activated charcoal can be considered. After decontamination, treatment of exposure is as for a general chemical and should be directed at the control of symptoms and the clinical condition.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Dry chemical or carbon dioxide for small fires, water spray or foam for large fires. Avoid heavy hose streams.

5.2. Special hazards arising from the substance or mixture

The essential breakdown products are volatile, toxic, malodorous, irritant and inflammable compounds such as nitrogen oxides, sulphur dioxide, carbon monoxide, carbon dioxide, hydrogen chloride, phosphorus pentoxide and various chlorinated organic compounds.

5.3. Advice for firefighters

Use water spray to keep fire-exposed containers cool. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Fight fire from protected location or maximum possible distance. Dike area to prevent water runoff. Firemen should wear self-contained breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

It is recommended to have a predetermined plan for the handling of spills. Empty, sealable vessels for the collection of spills should be available.

In case of large spill (involving 10 tonnes of the product or more):

1. use personal protection equipment; see section 8
2. call emergency telephone no.; see section 1
3. alert authorities.

Observe all safety precautions when cleaning up spills. Use personal protection equipment. Depending on the magnitude of the spill this may mean wearing respirator, face mask or eye protection, chemical resistant clothing, gloves and boots.

Stop the source of the spill immediately if safe to do so. Remove sources of ignition. Keep unprotected persons away from the spill area.

6.2. Environmental precautions

Contain the spill to prevent any further contamination of surface, soil or water. Wash waters must be prevented from entering surface water drains. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.

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6.3. Methods and materials for containment and cleaning up

It is recommended to consider possibilities to prevent damaging effects of spills, such as bunding or capping. See GHS (Annex 4, Section 6).

Use non-sparking tools and equipment. If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should be absorbed onto an absorptive material such as universal binder, hydrated lime, Fuller's earth or other absorbent clays. Collect the contaminated absorbent in suitable containers. Clean area with much water and industrial detergent. Absorb wash liquid onto an absorptive material and collect in suitable containers. The used containers should be properly closed and labelled.

Large spills which soak into the ground should be dug up and transferred to suitable containers.

Spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal.

6.4. Reference to other sections

See subsection 8.2. for personal protection.
 See section 13 for disposal.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling ...

Pregnant women should not work with this product. See section 11.

In an industrial environment, it is recommended to avoid all personal contact with the product, if possible by using closed systems with remote system control. The material should be handled by mechanical means as much as possible. Adequate ventilation or local exhaust ventilation is required. The exhaust gases should be filtered or treated otherwise. For personal protection in this situation, see section 8.

For its use as a pesticide, first look for precautions and personal protection measures on the officially approved label on the packaging or for other official guidance or policy in force. If these are lacking, see section 8.

Remove contaminated clothing immediately. Wash thoroughly after handling. Before removing gloves, wash them with water and soap. After work, take off all work clothes and footwear. Take a shower, using water and soap. Wear only clean clothes when leaving job. Wash protective clothing and protective equipment with water and soap after each use.

Do not discharge to the environment. Do not contaminate water when disposing of equipment wash waters. Collect all waste material and

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remains from cleaning equipment, etc., and dispose of as hazardous waste. See section 13 for disposal.

7.2. Conditions for safe storage, including any incompatibilities

The product is stable under normal conditions of warehouse storage. At temperatures below -10°C crystallisation may occur. Protect from frost. Storage at temperatures 5 - 30°C is recommended.

The product is degraded by fluorinated packaging materials.

Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading "POISON" is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

7.3. Specific end use(s)

The product is a registered pesticide which may only be used for the applications it is registered for, in accordance with a label approved by the regulatory authorities.

♣ SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Personal exposure limits To our knowledge, not established for the active ingredient in this product.

		Year	
Dimethyl-sulphoxide	ACGIH (USA) TLV	2015	Not established
	OSHA (USA) PEL	2015	Not established
	EU, 2000/39/EC as amended	2009	Not established
	Germany, MAK	2014	50 ppm (160 mg/m ³) Peak limitation: 100 ppm (320 mg/m ³) Skin notation
	HSE (UK) WEL	2011	Not established

However, other personal exposure limits defined by local regulations may exist and must be observed.

Tebuconazole

DNEL Not established
 EFSA has established an AOEL of 0.03 mg/kg bw/day
 PNEC 1 µg/l

8.2. Exposure controls

When used in a closed system, personal protection equipment will not be required. The following is meant for other situations, when the use of a closed system is not possible, or when it is necessary to open the system. Consider the need to render equipment or piping systems non-hazardous before opening.

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The precautions mentioned below are primarily meant for handling of the undiluted product and for preparing the spray solution, but can be recommended for spraying as well.

In cases of incidental high exposure, maximal personal protection may be necessary, such as respirator, face mask, chemical resistant coveralls.



Respiratory protection

The product does not normally present an inhalation hazard, but in the event of a discharge of the material which produces a heavy vapour or mist, workers should put on officially approved respiratory protection equipment with a universal filter type including particle filter.



Protective gloves

Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber. The breakthrough times of these materials for the product are unknown. Generally, however, the use of protective gloves will give only partial protection against dermal exposure. Small tears in the gloves and cross-contamination can easily occur. It is recommended to shift the gloves frequently and to limit the work to be done manually.



Eye protection

Wear safety glasses. It is recommended to have an eye wash fountain immediately available in the workplace when there is a potential for eye contact.



Other skin protection

Wear appropriate chemical resistant clothing to prevent skin contact depending on the extent of exposure. During most normal work situations where exposure to the material cannot be avoided for a limited time span, waterproof pants and apron of chemical resistant material or coveralls of polyethylene (PE) will be sufficient. Coveralls of PE must be discarded after use if contaminated. In cases of excessive or prolonged exposure, coveralls of barrier laminate may be required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on physical and chemical properties

Appearance	Light yellow liquid
Odour	Soap-like
Odour threshold	Not determined
pH	1% dispersion in water: 3.5 at 25°C
Melting point/freezing point	Not determined; crystallisation may take place below -10°C.
Initial boiling point and boiling range	Not determined
Flash point	73°C (closed cup)
Evaporation rate	Not determined
Flammability (solid/gas)	Not applicable (liquid)
Upper/lower flammability or explosive limits	Dimethylsulphoxide : 2.6 - 28 vol%

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Vapour pressure	Tebuconazole	: 1.3 x 10 ⁻⁶ Pa at 20°C 3.1 x 10 ⁻⁶ Pa at 25°C
	Dimethylsulphoxide	: 60 Pa at 20°C
Vapour density	Not determined	
Relative density	Not determined	
	Density: 0.978 g/ml at 20°C	
Solubility(ies)	Solubility of tebuconazole in:	
	ethyl acetate	> 250 g/l
	n-heptane	0.69 g/l at 20°C
	water	32 mg/l at 20°C
Partition coefficient n-octanol/water	Tebuconazole	: log K _{ow} = 3.7 (at 20°C; unionised)
Autoignition temperature	262°C	
Decomposition temperature	Not determined	
Viscosity	8.99 mPa.s at 20°C 4.90 mPa.s at 40°C	
Explosive properties	Not explosive	
Oxidising properties	Not oxidising	

9.2. Other information

Miscibility The product can be dispersed in water.

SECTION 10: STABILITY AND REACTIVITY

- 10.1. **Reactivity** To our knowledge, the product has no special reactivities.
- 10.2. **Chemical stability** Stable at ambient temperatures.
- 10.3. **Possibility of hazardous reactions** None known.
- 10.4. **Conditions to avoid** Heating of the product will produce harmful and irritant vapours.
- 10.5. **Incompatible materials** The product is degraded by fluorinated packaging materials.
- 10.6. **Hazardous decomposition products** See subsection 5.2.

SECTION 11: TOXICOLOGICAL INFORMATION

- 11.1. **Information on toxicological effects** * = Based on available data, the classification criteria are not met.

Product

Acute toxicity The product is not considered as harmful by ingestion, skin contact or by inhalation. * However, it should always be treated with the usual care of handling chemicals. The acute toxicity of the product is measured as:

Route(s) of entry	- ingestion	LD ₅₀ , oral, rat: > 2000 mg/kg (method OECD 420)
	- skin	LD ₅₀ , dermal, rat: > 2000 mg/kg (method OECD 402)
	- inhalation	LC ₅₀ , inhalation, rat: > 5.13 mg/l/4 h (method OECD 403) signs of toxicity at this concentration

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Skin corrosion/irritation	The product may be moderately irritating to skin (method OECD 404). *
Serious eye damage/irritation	The product may be moderately irritating to eyes (method OECD 405).
Respiratory or skin sensitisation ...	The product is found to be allergenic to mice (method OECD 429).
Germ cell mutagenicity	The product contains no ingredients known to be mutagenic. *
Carcinogenicity	The product contains no ingredients known to be carcinogenic. *
Reproductive toxicity	Adverse effects on fertility such as reduced litter size and effects on development were found for tebuconazole at maternally toxic doses in an animal test (method OECD 416). Malformations of offspring were found at maternally toxic doses (based on 13 studies).
STOT – single exposure	To our knowledge, no specific effects have been observed after single exposure. *
STOT – repeated exposure	The following has been measured on the active ingredient tebuconazole: Several effects were found in rats at LOEL 80 mg tebuconazole/kg bw/day for 13 weeks. Liver, adrenals, spleen and eyes were affected. *
Aspiration hazard	The product does not present an aspiration hazard. *
Symptoms and effects, acute and delayed	The first symptom to appear after skin or eye contact will be irritation. When a similar product was fed to laboratory animals at high doses, the main symptoms were passivity, impaired mobility and shortness of breath.
<u>Tebuconazole</u> Toxicokinetics, metabolism and distribution	Tebuconazole is almost completely absorbed, metabolised and excreted within a few days. It is widely distributed in the body. There is no evidence of accumulation.
Acute toxicity	The substance may be harmful by ingestion. It is not considered as harmful by skin contact or by inhalation. However, it should always be treated with the usual care of handling chemicals.
Route(s) of entry	- ingestion LD ₅₀ , oral, rat (male): 4000 - > 5000 mg/kg (method OECD 401) LD ₅₀ , oral, rat (female): 1700 - > 5000 mg/kg - skin LD ₅₀ , dermal, rat: > 2000 mg/kg (method OECD 402) * - inhalation LC ₅₀ , inhalation, rat: > 5.093 mg/l/4 h (method OECD 403) *
Skin corrosion/irritation	Not irritating to skin (method OECD 404). *

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Serious eye damage/irritation Mildly irritating to eyes (method FIFRA 81-4). *

Respiratory or skin sensitisation ... Not sensitising (method OECD 406). *

Octan-1-ol

Toxicokinetics, metabolism and distribution Octan-1-ol is rapidly absorbed and extensively metabolised. It is primarily excreted by expiration as carbon dioxide.

Acute toxicity The substance is not considered as harmful by inhalation, ingestion or skin contact. * The acute toxicity is measured as:

Route(s) of entry - ingestion LD₅₀, oral, rat: > 3200 mg/kg
 - skin LD₅₀, dermal, guinea pig: > 1000 mg/kg
 - inhalation LC₅₀, inhalation, rat: not available

Skin corrosion/irritation Mildly irritating to skin. *

Serious eye damage/irritation Mildly to moderately irritating to eyes. *

Respiratory or skin sensitisation ... To our knowledge, allergenic effects have not been reported. *

Tristyrylphenyl-polyethyleneglycol-phosphoric acid

Acute toxicity The substance is not considered as harmful by inhalation, ingestion or skin contact. * The acute toxicity is measured as:

Route(s) of entry - ingestion LD₅₀, oral, rat: > 2000 mg/kg (method OECD 401)
 - skin LD₅₀, dermal, rat: not determined
 - inhalation LC₅₀, inhalation, rat: not determined

Skin corrosion/irritation Not irritating to skin (method OECD 404). *

Serious eye damage/irritation Irritating to eyes (method OECD 405).

Respiratory or skin sensitisation ... Not determined.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivatives

Acute toxicity The substance is harmful by ingestion. The acute toxicity is measured as:

Route(s) of entry - ingestion LD₅₀, oral, rat: 1350 - 1470 mg/kg
 - skin LD₅₀, dermal, rat: not accessible
 - inhalation LC₅₀, inhalation, rat: not accessible

Skin corrosion/irritation Corrosive to skin.

Serious eye damage/irritation Corrosive to eyes.

Respiratory or skin sensitisation ... Not sensitising to guinea pigs. *

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SECTION 12: ECOLOGICAL INFORMATION

- 12.1. **Toxicity** The product is toxic to green algae and may be harmful to fish and aquatic invertebrates. It is not considered as harmful to birds, soil micro- and macroorganisms, insects and mammals.

The following has been measured on the product:

- Fish	Rainbow trout (<i>Oncorhynchus mykiss</i>)	96-h LC ₅₀	24.2 mg/l
- Invertebrates	Daphnids (<i>Daphnia magna</i>)	48-h EC ₅₀	17.2 mg/l
- Algae	Green algae (<i>Desmodesmus subspicatus</i>)	72-h EC ₅₀ 72-h NOEC	28.05 mg/l 2.88 mg/l
- Earthworms	<i>Eisenia fetida</i>	14-day LC ₅₀	1203 mg/kg dry soil
- Bees	Honey bee (<i>Apis mellifera</i> L.)	48-h LD ₅₀ , oral 48-h LD ₅₀ , contact	74 µg/bee 339 µg/bee

- 12.2. **Persistence and degradability** **Tebuconazole** is not readily biodegradable. It is slowly degraded in soil. Primary degradation half-lives vary with circumstances, usually from around 40 to 180 days in aerobic soil.

The product contains minor amounts of not readily biodegradable ingredients, which may not be degradable in waste water treatment plants.

- 12.3. **Bioaccumulative potential** See section 9 for octanol-water partition coefficient.

Tebuconazole is considered to have a low bioaccumulative potential. The Bioconcentration Factor (BCF) of tebuconazole is measured to be 65 on average for whole fish (measured on several fish species).

- 12.4. **Mobility in soil** **Tebuconazole** is of low mobility in soil.

- 12.5. **Results of PBT and vPvB assessment** None of the ingredients meets the criteria for being PBT or vPvB.

- 12.6. **Other adverse effects** Other relevant hazardous effects in the environment are not known.

♣ SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1. **Waste treatment methods** Remaining quantities of the material and empty but unclean packaging should be regarded as hazardous waste.

Disposal of waste and packagings must always be in accordance with all applicable local regulations.

Disposal of product According to the Waste Framework Directive (2008/98/EC), possibilities for reuse or reprocessing should first be considered. If this is not feasible, the material can be disposed of by removal to a

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licensed chemical destruction plant or by controlled incineration with flue gas scrubbing.

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Disposal of packaging

It is recommended to consider possible ways of disposal in the following order:

1. Reuse or recycling should first be considered. Reuse is prohibited except by the authorisation holder. If offered for recycling, containers must be emptied and triply rinsed (or equivalent). Do not discharge rinsing water to sewer systems.
2. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.
3. Delivery of the packaging to a licensed service for disposal of hazardous waste.
4. Disposal in a landfill or burning in open air should only occur as a last resort. For disposal in a landfill, containers should be emptied completely, rinsed and punctured to make them unusable for other purposes. If burned, stay out of smoke.

SECTION 14: TRANSPORT INFORMATION

ADR/RID/IMDG/IATA/ICAO classification

- | | |
|--|---|
| 14.1. UN number | 3082 |
| 14.2. UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (tebuconazole) |
| 14.3. Transport hazard class(es) | 9 |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | Marine pollutant |
| 14.6. Special precautions for user | Avoid any unnecessary contact with the product. Misuse can result in damage to health. Do not discharge to the environment. |
| 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code | The product is not transported in bulk by ship. |

SECTION 15: REGULATORY INFORMATION

- | | |
|--|--|
| 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture | Seveso category (Dir. 2012/18/EU): dangerous for the environment

Dir. 92/85/EEC: The employer shall assess the degree and duration of exposure at the workplace and any possible effect on pregnant women working with this product, and decide which measures should be taken. |
|--|--|

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Young people under the age of 18 are not allowed to work with the substance.

All ingredients are covered by EU chemical legislation.

15.2. **Chemical safety assessment** A chemical safety assessment is not required to be included for this product.

♣ SECTION 16: OTHER INFORMATION

Relevant changes in the safety data sheet

Minor corrections only.

List of abbreviations

ACGIH American Conference of Governmental Industrial Hygienists
 AOEL Acceptable Operator Exposure Level
 CAS Chemical Abstracts Service
 Dir. Directive
 DNEL Derived No Effect Level
 EC Emulsifiable Concentrate, or European Community
 EC₅₀ 50% Effect Concentration
 EFSA European Food Safety Authority
 EINECS European INventory of Existing Commercial Chemical Substances
 ELINCS European LIst of Notified Chemical Substances
 FIFRA Federal Insecticide, Fungicide and Rodenticide Act
 GHS Globally Harmonized classification and labelling System of chemicals, Fifth revised edition 2013
 HSE Health and Safety Executive
 IBC International Bulk Chemical code
 ISO International Organisation for Standardization
 IUPAC International Union of Pure and Applied Chemistry
 LC₅₀ 50% Lethal Concentration
 LD₅₀ 50% Lethal Dose
 LOEL Lowest Observed Effect Level
 MAK Maximale Arbeitsplatz-Konzentration
 MARPOL Set of rules from the International Maritime Organisation (IMO) for prevention of sea pollution
 NOEC No Observed Effect Concentration
 n.o.s. Not otherwise specified
 OECD Organisation for Economic Cooperation and Development
 OSHA Occupational Safety and Health Administration
 PBT Persistent, Bioaccumulative, Toxic
 PEL Permissible Exposure Limit
 PNEC Predicted No Effect Concentration
 Reg. Registration, or Regulation
 STOT Specific Target Organ Toxicity

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TLV Threshold Limit Value
 vPvB very Persistent, very Bioaccumulative
 WEL Workplace Exposure Limit
 WHO World Health Organisation

References Data measured on the product are unpublished company data. Data on ingredients are available from published literature and can be found several places.

Method for classification Eye irritation: test data
 Sensitisation – skin: test data
 Toxic to reproduction: calculation method
 Hazards to the aquatic environment: calculation method

Used hazard statements H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 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 of use.

Advice on training This material should only be used by persons who are made aware of its hazardous properties and have been instructed in the required safety precautions.

The information provided in this safety data sheet is believed to be accurate and reliable, but uses of the product vary and situations unforeseen by FMC Corporation may exist. The user has to check the validity of the information under local circumstances.

Prepared by: FMC Corporation / Cheminova A/S / GHB