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CVR No. DK 12 76 00 43

SAFETY DATA SHEET

EPOXICONAZOLE 125 g/l SC

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** .....

STRAND
EPOXICONAZOLE 125 g/l SC
Contains epoxiconazole

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)

Medical emergencies:
Austria: +43 1 406 43 43
Belgium: +32 70 245 245
Bulgaria: +359 2 9154 409
Cyprus: 1401
Czech Republic: +420 224 919 293
+420 224 915 402
Denmark: +45 82 12 12 12
France: +33 (0) 1 45 42 59 59
Finland: +358 9 471 977
Greece: 30 210 77 93 777
Hungary: +36 80 20 11 99
Ireland (Republic): +352 1 809 2166
Italy: +39 02 6610 1029
Lithuania: +370 523 62052
+370 687 53378
Luxembourg: +352 8002 5500
Netherlands: +31 30 274 88 88
Norway: +47 22 591300
Poland: +48 22 619 66 54
+48 22 619 08 97
Portugal: 808 250 143 (in Portugal only)
+351 21 330 3284
Romania: +40 21318 3606
Slovakia: +421 2 54 77 4 166
Slovenia: +386 41 650 500
Spain: +34 91 562 04 20
Sweden: +46 08-331231
112
Switzerland: 145
United Kingdom: 0870 600 6266 (in the UK only)
U.S.A. & Canada: +1 800 / 331-3148 (PROSAR)
All other countries: +1 651 / 632-6793 (PROSAR - Collect)

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SECTION 2: HAZARDS IDENTIFICATION

2.1. **Classification of the substance or mixture**

Inhalation toxicity: Category 4 (H332)
Carcinogenicity: Category 2 (H351)
Reproduction toxicity: Category 1B (H360Df)
Hazards to the aquatic environment, acute: Category 1 (H400)
chronic: Category 1 (H410)

WHO classification ..... Class U (unlikely to present acute hazard in normal use).

Health hazards ..... Chronic exposure to epoxiconazole may cause harm to the unborn child and impair fertility. Epoxiconazole is a suspected carcinogen.

The product is harmful by inhalation.

Environmental hazards ..... The product is very toxic to aquatic organisms.

2.2. **Label elements**

According to EU Reg. 1272/2008 as amended

Product identifier ..... Epoxiconazole 125 g/l SC
Contains epoxiconazole

Hazard pictograms (GHS07, GHS08, GHS09)

Signal word ..... Danger

Hazard statements
H332 ..... Harmful if inhaled.
H351 ..... Suspected of causing cancer.
H360Df ..... May damage the unborn child and suspected of damaging fertility.
H410 ..... Very toxic to aquatic life with long lasting effects.

Supplementary hazard statements
EUH208 ..... Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.
EUH401 ..... To avoid risks to human health and the environment, comply with the instructions of use.

Precautionary statements
P261 ..... Avoid breathing vapours.
P273 ..... Avoid release to the environment.
P280 ..... Wear protective gloves, protective clothing and eye/face protection.
P304+P340 ..... IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312 ..... Call a POISON CENTER or physician if you feel unwell.
P501 ..... Dispose of contents/container as hazardous waste.

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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

Epoxiconazole ..... Content: 12% by weight

CAS name ..... 1H-1,2,4-Triazole, 1-[[(2R,3S)-3-(2-chlorophenyl)-2-(4-fluoro-phenyl)oxiranyl]methyl]-, rel-

CAS no. ..... 133855-98-8 (before 106325-08-0)

IUPAC name ..... (2RS,3SR)-1-[3-(2-Chlorophenyl)-2,3-epoxy-2-(4-fluorophenyl)-propyl]-1H-1,2,4-triazole

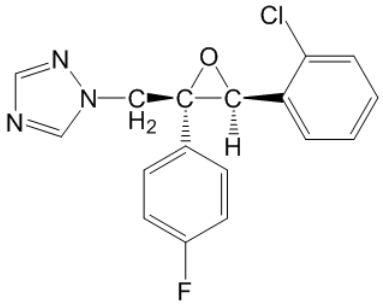
ISO name/EU name ..... Epoxiconazole

EC no. ..... ELINCS no.: 406-850-2

EU index no. 613-175-00-9

Classification of the ingredient ..... * = Harmonised classification
Carcinogenicity: Category 2 (H351) *
Reproduction toxicity: Category 2 (H360Df) *
Hazards to the aquatic environment, acute: Category 1 (H400)
chronic: Category 2 (H411) *

Structural formula .....



Reportable ingredients	Content (% w/w)	CAS no.	EC no.	Classification
Alcohols, C16-18, ethoxylated, propoxylated	22	68002-96-0	None	Aquatic Acute 1 (H400)
Hydrocarbons, C10-C13, aromatics, < 1% naphthalene Reg. no. 01-2119451097-39	14		922-153-0	Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411)

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Propane-1,2-diol Reg. no. 01-2119456809-23	max. 13	57-55-6	EINECS no.: 200-338-0	None
1,2-Benzisothiazol-3(2H)-one	0.015	2634-33-5	EINECS no.: 220-120-9	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400)

SECTION 4: FIRST AID MEASURES

4.1. **Description of first aid measures** — If exposure has occurred, do not wait for symptoms to develop, but immediately start the procedures described below.

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 flush skin with much water while removing contaminated clothing and footwear. Wash with water and soap. See physician if any symptom 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. See physician if irritation develops.

Ingestion ..... Let the exposed person rinse mouth and let him/her drink several glasses of water or milk, but do not induce vomiting. If vomiting does occur, let him/her rinse mouth and drink fluids 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** — To our knowledge, signs of adverse effects in humans have not been reported. When fed to animals at high dosage, signs of toxicity included dyspnoea, loss of balance and otherwise disturbed behaviour.

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.

Note to physician ..... A specific antidote for exposure to this material is not known. Gastric lavage and/or administration of activated charcoal can be considered.

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.

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5.2. **Special hazards arising from the substance or mixture**

The essential breakdown products are volatile, toxic, irritant and inflammable compounds such as nitrogen oxides, hydrogen fluoride, hydrogen chloride, carbon monoxide, carbon dioxide and various fluorinated and 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 1 tonne 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. Keep unprotected persons away from the spill area. Avoid and reduce mist formation as much as possible.

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.

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).

If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should immediately 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 detergent. Absorb wash liquid with absorbent and transfer to suitable containers. The used containers should be properly closed and labelled.

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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** ..... 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.

Keep all unprotected persons and children away from working area.

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.

The respirator should be cleaned and filter replaced according to the accompanying instructions.

Do not discharge to the environment. Do not contaminate soil or water when disposing of equipment wash waters. Collect all waste material and remains from cleaning equipment, etc., and dispose of as hazardous waste. See section 13 for disposal.

Persons working with this material for a longer period should be careful to minimise exposure. See section 11. Pregnant women must avoid working with the substance altogether, because the substance may have an effect on the unborn child.

Keep all unprotected persons and children away from working area.

7.2. **Conditions for safe storage, including any incompatibilities** The product is stable under normal conditions of warehouse storage. Protect against extremes of heat or cold. Storage at temperatures

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between 5 and 40°C is recommended.

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 ..... Not established for epoxiconazole.

		Year	
Propane-	AIHA (USA) WEEL	2015	10 mg/m^3
1,2-diol	MAK (Germany)	2014	Cannot be established at present
	HSE (UK) WEL	2011	8-hr TWA 150 ppm (474 mg/m^3), total (vapour and particulates) 10 mg/m^3 (particulates)

Aromatic hydrocarbons ..... 100 ppm total hydrocarbon is recommended.

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

Epoxiconazole

DNEL, systemic ..... 0.008 mg/kg bw/day
PNEC, aquatic ..... 0.2 µg/l

Propane-1,2-diol

DNEL, inhalation, systemic ..... 183 mg/m^3
DNEL, inhalation, local ..... 10 mg/m^3
PNEC, fresh water ..... 260 mg/l
PNEC, marine water ..... 26 mg/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.

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.

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

Respiratory protection — In the event of an accidental discharge of the material which produces a vapour or mist, workers should put on officially approved respiratory protection equipment with a universal filter type including particle filter.

Protective gloves ..... — Wear long chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber. The breakthrough times of these materials for epoxiconazole 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 limit the work to be done manually and to change the gloves frequently. Be careful not to touch anything with contaminated gloves. Used gloves should be thrown out and not be reused. Wash hands with water and soap immediately after work is finished.

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	Off-white liquid
Odour	Aromatic odour
Odour threshold	Not determined
pH	4.8 at 25°C
Melting point/freezing point	< 0°C
Initial boiling point and boiling range	Not determined
Flash point	> 200°C if any (Pensky-Martens closed cup)
Evaporation rate	Not determined
Flammability (solid/gas)	Not applicable (liquid)
Upper/lower flammability or explosive limits	**Aromatic hydrocarbons** : 0.6 - 7.0 vol% (≈ 0.6 - 7.0 kPa)
Vapour pressure	**Epoxiconazole** : < 1.0 x 10^{-5} Pa at 20°C
Vapour density	Not determined

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Relative density	Not determined Density: 1.04 g/ml
Solubility(ies)	Solubility of **epoxiconazole** at 20°C in: n-heptane 1.0 g/l acetone 180.0 g/l water 7 mg/l at pH 7
Partition coefficient n-octanol/water	**Epoxiconazole** : log K_{ow} = 3.44 **Aromatic hydrocarbons** : some of the main components have log K_{ow} = 4.0 - 4.4 at 25°C by model calculation
Autoignition temperature	231°C
Decomposition temperature	Not determined
Viscosity	The product is a non-newtonian fluid. Viscosity is dependent on shear rate. 1234 mPa.s at 20°C and 12 rpm; 1038 mPa.s at 40°C and 12 rpm
Explosive properties.....	Not explosive
Oxidising properties	Not oxidising

9.2. **Other information**

Miscibility	The product is dispersible in water.

SECTION 10: STABILITY AND REACTIVITY

10.1.	**Reactivity**	To our knowledge, the product has no special reactivities.
10.2.	**Chemical stability**	The product is stable during normal handling and storage 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**	Strong acids and alkalis.
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 harmful by inhalation. It is considered as less harmful by skin contact and ingestion. The acute toxicity is measured as:
Route(s) of entry	- ingestion	LD_{50}, oral, rat: > 2000 mg/kg (method OECD 425) *
	- skin	LD_{50}, dermal, rat: > 2000 mg/kg (method OECD 402) *
	- inhalation	LC_{50}, inhalation, rat: 2.12 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	Not irritating to eyes (method OECD 405). *
Respiratory or skin sensitisation	Not sensitising (method OECD 406). *
Germ cell mutagenicity	The product contains no ingredient known to be mutagenic. *
Carcinogenicity	Increased tumour incidences were observed for epoxiconazole at dose levels that also resulted in significantly lower body weights (method OECD 451 and 452).
Reproductive toxicity	An increased number of pups either being born dead or dying early was observed (method OECD 416) for epoxiconazole. In 6 teratogenicity studies (method OECD 414), skeletal variations occurred.
STOT – single exposure	To our knowledge, specific effects after single exposure have not been observed. *
STOT – repeated exposure	The following has been found for the active ingredient epoxiconazole: Target organ: liver LOAEL: 270 ppm (21 - 24 mg/kg bw/day) in a 90-day rat study. At this exposure level, hepatocellular hypertrophy was observed (method OECD 408). *
Aspiration hazard	The product does not present an aspiration pneumonia hazard. *
Symptoms and effects, acute and delayed	To our knowledge, signs of adverse effects in humans have not been reported. When fed to animals at high dosage, signs of toxicity included dyspnoea, loss of balance and otherwise disturbed behaviour.

Epoxiconazole

Toxicokinetics, metabolism and distribution		After oral intake, epoxiconazole is rapidly absorbed and widely distributed in the body. It is extensively metabolised. It is excreted within a few days. Accumulation is not likely.
Acute toxicity		The substance is not considered as harmful by ingestion, inhalation and skin contact. * The acute toxicity is measured as:
Route(s) of entry	- ingestion	LD_{50}, oral, rat: > 5000 mg/kg (method OECD 401)
	- skin	LD_{50}, dermal, rat: > 2000 mg/kg (method OECD 402)
	- inhalation	LC_{50}, inhalation, rat: > 5.3 mg/l/4 h (method OECD 403)
Skin corrosion/irritation		Not irritating to skin (method OECD 404). *
Serious eye damage/irritation		Not irritating to eyes (method OECD 405). *
Respiratory or skin sensitisation		Not sensitising (method OECD 406). *

Alcohols, C16-18, ethoxylated, propoxylated

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CVR No. DK 12 76 00 43

Acute toxicity		The substance is not considered as harmful by single exposure. * The acute toxicity as measured on a similar substance is:
Route(s) of entry	- ingestion	LD_{50}, oral, rat: 3400 mg/kg
	- skin	LD_{50}, dermal, rat: not available
	- inhalation	LC_{50}, inhalation, rat: not available
Skin corrosion/irritation		Not irritating to skin. *
Serious eye damage/irritation		Not irritating to eyes. *
Respiratory or skin sensitisation		Not sensitising (by analogy to similar substances). *

Hydrocarbons, C10-C13, aromatics, < 1% naphthalene

Acute toxicity		The substance is not considered as harmful. * The acute toxicity as measured on a similar product is:
Route(s) of entry	- ingestion	LD_{50}, oral, rat: > 5000 mg/kg (method OECD 401)
	- skin	LD_{50}, dermal, rat: > 2000 mg/kg (method OECD 402)
	- inhalation	LC_{50}, inhalation, rat: > 4.7 mg/l (method OECD 403)
Skin corrosion/irritation		Can cause skin dryness (measured on similar products; method OECD 404).
Serious eye damage/irritation		May cause mild, short-lasting discomfort to eyes (measured on similar products; method OECD 405). *
Respiratory or skin sensitisation		Not expected to cause respiratory or skin sensitisation (measured on similar products; method OECD 406). *
Aspiration hazard		Aromatic hydrocarbons present an aspiration hazard.

1,2-Benzisothiazol-3(2H)-one

Acute toxicity		The substance is harmful by ingestion.
Route(s) of entry	- ingestion	LD_{50}, oral, rat (male): 670 mg/kg LD_{50}, oral, rat (female): 784 mg/kg (method OPPTS 870.1100, measured on 73% solution)
	- skin	LD_{50}, dermal, rat: > 2000 mg/kg * (method OPPTS 870.1200, measured on 73% solution)
	- inhalation	LC_{50}, inhalation, rat: not available
Skin corrosion/irritation		Slightly irritating to skin (method OPPTS 870.2500).
Serious eye damage/irritation		Severely irritating to eyes (method OPPTS 870.2400).
Respiratory or skin sensitisation		Moderate dermal sensitizer to guinea pigs (method OPPTS 870.2600). The substance appears to be significantly more sensitising to humans.

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SECTION 12: ECOLOGICAL INFORMATION

12.1. **Toxicity** ..... The product is very toxic to aquatic organisms and insects. It is non-toxic birds, earthworms and soil macro- and microorganisms.

The ecotoxicity measured on the product is:

- Fish	Rainbow trout (*Oncorhynchus mykiss*)	96-h LC_{50}: 1.1 mg/l
- Invertebrates	Daphnids (*Daphnia magna*)	48-h EC_{50}: 0.63 mg/l
- Algae	Green algae (*Pseudokirchneriella subcapitata*) ..	72-h EC_{50}: > 0.98 mg/l
	(*Desmodesmus subspicatus*)	72-h EC_{50}: 8.78 µg/l
- Plants	Duckweed (*Lemna minor*)	7-day EC_{50}: 90.7 µg/l
- Birds	Japanese quail (*Coturnix coturnix japonica*)	LD_{50}: > 2000 mg/kg
- Earthworms	*Eisenia fetida* Sav.	28-day LC_{50}: > 1000 mg/kg soil
- Insects	Honeybees (*Apis mellifera*)	96-h LD_{50}, oral: > 100 µg/bee 96-h LD_{50}, contact: > 200 µg/bee

12.2. **Persistence and degradability** .... **Epoxiconazole** is not readily biodegradable. Primary degradation half-lives vary from a few months to some years in aerobic soil depending on circumstances. It can accumulate in soil if applied in consecutive years.

Aromatic hydrocarbons are readily biodegradable as measured according to OECD guidelines. However, they are not always rapidly degraded in the environment, but are expected to be degraded at a moderate rate, depending on circumstances.

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

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

Epoxiconazole has a moderate potential for bioaccumulation, but is rapidly excreted. The bioaccumulation factor (BCF) is measured to 70 for whole fish (rainbow trout).

Ethoxylated propoxylated alcohol must be considered to have a potential to bioaccumulate to a certain extent. No exact data are available.

Aromatic hydrocarbons have a potential to bioaccumulate if continuous exposure is maintained. Most components can be metabolised by many organisms. Bioaccumulation factors (BCFs) of some of the main components are 1200 - 3200 by model calculation.

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12.4. **Mobility in soil** ..... **Epoxiconazole** is of low mobility in soil. Absorption to soil depends on soil type and circumstances.

Aromatic hydrocarbons are not mobile in the environment, but are volatile and will evaporate to the air if released onto water or on the surface of soil. They float and can migrate to sediment.

♣ 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 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. (epoxiconazole, alkyl(C3-6)benzenes and ethoxylated propoxylated C16-18 alcohols)

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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): toxic
Second Seveso category: dangerous for the environment

The employer shall assess any risks to the safety or health and any possible effect on the pregnancies or breastfeeding of workers and decide what measures should be taken (Dir. 92/85/EEC).

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

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
AIHA	American Industrial Hygiene Association
CAS	Chemical Abstracts Service
Dir.	Directive
DNEL	Derived No Effect Level
EC	European Community
EC_{50}	50% Effect Concentration
EINECS	European INventory of Existing Commercial Chemical Substances
ELINCS	European LIst of Notified Chemical Substances
GHS	Globally Harmonized classification and labelling System of chemicals, Fifth revised edition 2013
HSE	Health & Safety Executive, UK

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IBC	International Bulk Chemical code
ISO	International Organisation for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	50% Lethal Concentration
LD_{50}	50% Lethal Dose
LOAEL	Lowest Observed Adverse Effect Level
MAK	Maximale Arbeitspaltz-Konzentration
MARPOL	Set of rules from the International Maritime Organisation (IMO) for prevention of sea pollution
n.o.s.	Not otherwise specified
OECD	Organisation for Economic Cooperation and Development
OPPTS	Office of Prevention, Pesticides & Toxic Substances
PBT	Persistent, Bioaccumulative, Toxic
PNEC	Predicted No Effect Concentration
Reg.	Registration, or Regulation
SC	Suspension Concentrate
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value
TWA	Time Weighed Average
vPvB	very Persistent, very Bioaccumulative
WEEL	Workplace Environmental Exposure Limit
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 ..... Inhalation toxicity: test data
Carcinogenicity: calculation rules
Reproduction toxicity: calculation rules
Hazards to the aquatic environment: test data

Used hazard statements .....

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H360Df	May damage the unborn child and suspected of damaging fertility.
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.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.
EUH401	To avoid risks to human health and the environment, comply with the instructions of use.

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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