

Section 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: ESKER®
Product code: 073-02

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

Product Use: Fungicide

1.3 Details of the supplier of the safety data sheet

Company: Life Scientific Ltd,
Block 4,
Belfield Office Park,
Beech Hill Road,
Dublin 4
Ireland
Telephone: +353 (0) 1 2832024
Email: info@lifescientific.com
Web: www.lifescientific.com

1.4 Emergency contact information

In case of Emergency: Tel. NHS 111

Section 2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin irritation	Category 2	H315
Skin sensitisation	Category 1	H317
Eye irritation	Category 2	H319
STOT SE	Category 3	H335
Reproductive toxicity	Category 2	H361d
Acute aquatic	Category 1	H400
Aquatic Chronic	Category 1	H410

2.2 Label Elements

Classification according to Regulation (EC) No 1272/2008

Hazard components which must be listed on the label:

- Tebuconazole
- Prothioconazole
- N,N-Dimethyl decanamide



Signal Word:

Warning

Hazard statements:

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H361d Suspected of damaging the unborn child.
 H410 Very toxic to aquatic life with long lasting effects

EUH208 Contains 2-[2-(1-chlorocyclopropyl)-2-hydroxy-3-phenylpropyl]-2, 4-dihydro-3H-1,2,4- triazole-3-thione. May produce an allergic reaction.
 EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statement:

P102 Keep out of reach of children
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P308+P313 If exposed or concerned: Get medical advice/attention.
 P391 Collect spillage
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 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.
 SP1 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).

2.3 Other Hazards

Special labelling of certain mixtures: To avoid risks to human health and environment comply with the instructions for use.

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

No substances fulfil the criteria set out in Annex II, Part A of the REACH Regulation (EC) No 1907/2006.

3.2 Mixtures

Chemical Name	CAS	EC	Classification (Regulation (EC) No 1272/2008)	Concentration (% w/w)
Prothioconazole	178928-70-6	-	Aqua. Acute 1, H400 Aquatic Chronic 1, H410	16.3
Tebuconazole	107534-96-3	403-640-2	Acute Tox 4, H302 Repr. 2, H361d Aquatic Acute 1 H400 Aquatic Chronic 1, H410	8.2
N,N-Dimethyl decanamide	14433-76-2	238-405-1	Skin Irrit 2 H315 Eye Irrit 2 H319 STOT SE 3 H335 Aquatic Chronic 3 H412	>20

Further information

Prothioconazole	178928-70-6	M-Factor: 10 (Acute), 1 (chronic)
Tebuconazole	107534-96-3	M-Factor: 1 (Acute), 10 (chronic)

Section 4. FIRST AID MEASURES

Generally, in case of doubt or if symptoms persist, always call a doctor. NEVER give anything by mouth to an unconscious person.

4.1 Description of first aid measures

Inhalation : If inhaled, remove victim to fresh air. If breathing is difficult, give oxygen. If breathing is irregular or stopped, give artificial respiration. Consult a physician or Poison Control Centre immediately.

Ingestion : DO NOT induce vomiting unless directed to do so by a Poison Control Centre. If patient is conscious, wash out mouth with water. Seek medical advice and show the product container, label or data sheet if possible.

Skin contact: Remove contaminated clothing immediately. Wash skin immediately with plenty of water. If skin irritation persists, Consult a physician. Wash contaminated clothing before re-use.

Eye contact: Remove contact lenses if present. Rinse immediately with plenty of water, with the eyelid open for at least 15 minutes. Obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No known symptoms

4.3 Indication of any immediate medical attention and special treatment needed

Information to physician: 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.

Section 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

For small fires: Use water spray, dry chemical, alcohol-resistant foam or carbon dioxide.
For large fires: Use alcohol-resistant foam or water spray. Avoid using solid water stream as it may cause the fire to scatter or spread.

5.2 Special hazards arising from the substance or mixture

The product contains combustible organic components, in case of fire, dense black smoke containing hazardous combustion products will be formed. Inhalation of decomposition products may cause health problems.

5.3 Advice for Firefighters

Wear self-contained breathing apparatus. Fight fire from a safe distance and a protected location.
Further information : Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

Section 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

6.2 Environmental precautions

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in drums for waste disposal. Prevent entry into sewers or waterways.

6.3 Methods and materials for containment and cleaning up

Clean preferably with a detergent, avoid the use of solvents.

6.4 Reference to other sections

No data is available.

Section 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

P261 Avoid breathing spray.
 P312 Call a POISON CENTRE/doctor/if you feel unwell.
 P337+P313 If eye irritation persists: Get medical advice attention.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.

No special technical protective measures required. No special handling advice required. Avoid contact with skin and eyes. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. When using, do not eat, drink or smoke. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep out of the reach of children.
 Packing: Always keep in containers of same material as the original

7.3 Specific end use(s)

Refer to the label and/or leaflet.

Section 8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Component	CAS number	Control parameters	Source
Prothioconazole	178928-70-6	1.4 mg/m ³	Supplier
Tebuconazole	107534-96-3	0.2 mg/ m ³	Supplier

Exposure controls:

Individual protection measures, such as personal protective equipment:

Use personal protective equipment that is clean and properly maintained. Store personal protective equipment in a clean place, away from the work area.

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before reuse. Ensure adequate ventilation, especially in confined areas.

Eye / face protection:

Avoid contact with eyes. Use safety eyewear designed to protect against liquid splashes. It is necessary to wear safety goggles in accordance with standard EN166.

Protection of hands:

Wear suitable protective gloves if prolonged or repeated contact with skin.

Body protection:

No special protective equipment required. Select skin and body protection based on the physical job requirements

Respiratory protection:

Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical properties

Form: Liquid
 Colour: Tan
 Odour: Characteristic

Chemical properties

pH: 4.5 – 6.5 at (1%) (23°C)
 Melting point: 140.3 °C Prothioconazole
 105 °C Tebuconazole
 Boiling point/boiling range: No data available
 Flash point: >100 °C
 Evaporation rate: No data available
 Flammability (solid, gas): No data available
 Upper/lower flammability or explosive limits: Not applicable
 Vapour pressure: No data available
 Vapour density (air): Not applicable
 Density: 0.99 g/cm³ at 20 °C
 Solubility(ies): Water Dispersible
 Partition coefficient: Prothioconazole: log Pow: 3.82 at 20 °C
 n-octanol/water: Tebuconazole: log Pow: 3.7
 Auto-ignition temperature: No data available
 Decomposition temperature: No data available
 Viscosity: No data available
 Explosive properties: Non-explosive
 Oxidising properties: Non-oxidising

The information above is based on a similar product.

9.2 Other Information

None

Section 10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions

10.2 Chemical Stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data is available

10.4 Conditions to avoid

Extremes of temperature and direct sunlight

10.5 Incompatible material

Store only in the original container

10.6 Hazardous decomposition products

No decomposition products expected under normal conditions of use.

Section 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Oral Toxicity LD50 Rat:	> 5000 mg/kg
Acute inhalation toxicity LC50 Rat:	> 5000 mg/L
Acute Dermal Toxicity LD50 Rat:	> 4000 mg/kg
Acute Eye Irritation, Rabbit:	Irritating to eyes
Acute Skin Irritation, Rabbit:	Irritating to skin
Sensitisation, Guinea pig:	Not sensitising

Assessment STOT Specific target organ toxicity – single exposure

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

Assessment STOT Specific target organ toxicity – repeated exposure

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

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

Assessment mutagenicity

Prothioconazole was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

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

Assessment carcinogenicity

Prothioconazole was not carcinogenic in lifetime feeding studies in rats and mice.

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

Assessment toxicity to reproduction

Prothioconazole 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 Prothioconazole is related to parental toxicity.

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.

Assessment developmental toxicity

Prothioconazole caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Prothioconazole are related to maternal toxicity.

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

Aspiration hazard

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

Further information

Irritating to respiratory system.

The information above is based on a similar product.

Section 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	LC50 (Oncorhynchus mykiss) 3.94 mg/l Exposure time: 96 h
Toxicity to aquatic invertebrates	EC50 (Daphnia magna) 8.8 mg/l Exposure time: 48 h
Chronic toxicity to aquatic invertebrates	NOEC (Daphnia): 0.01 mg/l Exposure time: 21 d The value mentioned relates to the active ingredient tebuconazole.
Toxicity to aquatic plants	EC50 (Raphidocelis subcapitata) 9.5 mg/l Growth rate; Exposure time: 72 h EC50 (Skeletonema costatum) 0.046 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient prothioconazole. NOEC (Skeletonema costatum) 0.0073 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient prothioconazole.

12.2 Persistence and degradability

Biodegradability:	Prothioconazole is not readily biodegradable. Tebuconazole is not readily biodegradable.
Koc:	Prothioconazole: Koc:1765 Tebuconazole: Koc: 769

12.3 Bioaccumulative potential

Prothioconazole, does not bioaccumulate.
Tebuconazole does not bioaccumulate.

12.4 Mobility in soil

Mobility:	Prothioconazole has slight mobility in soils. Tebuconazole: Slightly mobile in soils.
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12.5 Results of PBT and vPvB assessment

Prothioconazole: 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).
Tebuconazole: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

No data available

The information above is based on a similar product.

Section 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Do not discharge into drains or rivers. Waste management is performed without endangering human health and without harming the environment, and in particular without risk to water, air, soil, fauna and flora.

Recycle or dispose of in accordance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste; do not dispose of waste into the environment.

Contaminated packaging: Empty container completely, rinse three times. Keep the label on the recipient.

Section 14. TRANSPORT INFORMATION

Transport in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO / IATA for air transport (ADR 2011 - IMDG 2010 - ICAO / IATA 2011).

14.1 UN Number

3082

14.2 UN proper shipping name

Environmentally hazardous substance, liquid, N.O.S., (TEBUCONAZOLE, PROTHIOCONAZOLE SOLUTION).

14.3 Transport hazard class

9

14.4 Packing group

III

14.5 Environmental hazards

Dangerous for the environment

14.6 Special precautions for user

See sections 6-8 of this Safety Data Sheet

14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC code

No transport in bulk according to the IBC Code

Section 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture in Section 3.

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

15.2 Chemical safety assessment

None

Section 16. OTHER INFORMATION

Full text hazard statements mentioned in section 2 and 3.

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction

- H319 Causes severe eye irritation.
- H335 May cause respiratory irritation.
- H361d Suspected of damaging the unborn child
- H400 Very toxic to aquatic organisms.
- H410 Very toxic to aquatic organisms with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

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