

PRODUCT SAFETY DATA SHEET

FATHOM

1. Identification of the Preparation and the Company:

Trade name: FATHOM

A fungicide for use in agriculture and horticulture

Company Identification:

Headland Agrochemicals Ltd.

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2. Hazards:

Harmful – possible risk of harm to the unborn child. Irritating to eyes. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

3. Composition:

An emulsifiable concentrate formulation containing 200 gms/litre of tebuconazole

Reportable ingredients:

Tebuconazole (ISO) 20% w/w

CAS No. 107534-96-3

Hazard symbol Harmful Xn, Dangerous for the Environment N

Risk phrases R22 Harmful if swallowed

R51 Toxic to aquatic organisms

R53 May cause long-term adverse effects in the aquatic environment

R63 Possible risk of harm to the unborn child.

Aliphatic alcohol 16% w/w

Hazard Symbol Dangerous for the Environment N

Risk phrases R51 Toxic to aquatic organisms

R53 May cause long-term adverse effects in the aquatic environment

Poly(arylalkyl)phenol polyethylene glycol phosphoric acid 8.0% w/w
Hazard Symbol Irritant Xi
Risk phrases R36 Irritating to eyes

Benzenesulfonic acid, mono C10-14 alkyl derivatives 2% w/w
CAS No. 85117-49-3
Hazard Symbol Harmful Xn, Corrosive C
Risk Phrases R22 Harmful if swallowed
R34 Causes burns

4. First Aid Measures:

Eyes: Irrigate with clean water for at least 15 minutes and seek medical attention if any irritation or redness persists.
Skin: Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical attention if any irritation or redness persists.
Ingestion: If swallowed wash out mouth with water and seek medical attention immediately. Do not induce vomiting. If vomiting occurs, rinse out mouth and give fluids again.
Inhalation: Remove from exposure and provide maximum ventilation

Guide to Doctors There is no specific antidote for exposure to this product. Treatment should be symptomatic and supportive after decontamination. .

5. Fire Fighting Measures

FATHOM will burn, flashpoint 76°C. If involved in a fire, fumes and vapours will be toxic, malodourous, irritant and inflammable and may include nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen chloride, phosphorus pentoxide and other chlorinated organic compounds. Fire fighters should wear breathing apparatus and protective clothing.

Use dry chemical, foam, water spray, sand or earth but avoid high pressure water jets.

Prevent entry of the product or contaminated water into watercourses ditches or drains by bunding the area with sand or earth.

If possible, remove intact containers from exposure to fire and spray unopened containers with water mist to keep them cool.

6. Accidental Release (Spillage)

Wear suitable protective clothing (see Section 8). Remove contaminated clothing immediately. Remove all sources of ignition. Do not eat drink or smoke. Keep bystanders away.

Absorb spillage with inert material (e.g. absorbent clay, sand or earth), shovel or sweep up and transfer to a labelled container for later removal to a safe place for disposal.

Wash down the area with plenty of water and industrial detergent when all traces of the spill have been removed. Large spills which soak into the ground should be dug up and transferred to labelled metal drums.

Prevent the spillage from entering watercourses sewers or drains by bunding if necessary. Inform the authorities immediately if contamination of waterways, sewers or drains is threatened or occurs.

7. Storage and Handling

Wash all protective clothing thoroughly after use especially the insides of gloves. Wash hands and exposed skin before meals and after work.

Keep in original container, tightly closed.

Keep cool and dry in a suitable agricultural chemical store under lock and key away from food, drink and animal feedingstuffs and out of reach of children.

Protect from frost. Storage at between 5°C and 30°C is recommended.

8. Personal Protection

Wear suitable protective clothing, protective gloves and face-shield to BS2092 when handling the concentrated product or contaminated surfaces. Avoid breathing the spray mist when using. Unlined nitrile, PVC natural rubber, butyl rubber, barrier laminate or viton gloves are recommended.

Decontaminate all personal protective equipment after use.

Occupational Exposure Limits: None established

9. Physical and Chemical Properties

Appearance:	A light yellow mobile liquid
Odour:	Characteristic soapy odour
Solubility:	Completely miscible in water
Specific Gravity:	0.976 at 20°C
Viscosity:	Not available
Partition Coefficient:	log Pow = 3.7
Flashpoint:	76°C
Boiling Point:	Not available
Freezing point:	May crystallise below -10°C

10. Stability and Reactivity

Stability: Stable at ambient temperatures. Stores for at least 2 years in original containers in normal agricultural chemical storage conditions.

Conditions to avoid: This product is degraded by fluorinated packaging materials.

11. Toxicological Information

Acute Toxicity:

Acute oral LD50:	>2,000 mg/kg.bw (rat) *
Acute dermal LD50:	>4,000 mg/kg.bw (rat) *
Inhalation LC50:	>8.76 mg/l over 4 hours *
Irritancy:	Irritating to eyes, moderately irritating to skin and eyes
Skin sensitisation:	Not a sensitiser (Buehler Test) *

* Based on measurements for a similar formulation.

Chronic toxicity Possible risk of harm to the unborn child. No carcinogenic or mutagenic effects have been recorded.

12. Environmental Protection

FATHOM is toxic to aquatic plants and harmful to fish and aquatic invertebrates.

Aquatic organisms:

96 hour LC 50 Rainbow trout 17.7 mg/litre *

48 hour EC50 Daphnia magna 21.5 mg/l *

72 hour EC50 Green algae (Desmodesmus) 0.110 mg/l *

Bees:

Non-toxic to bees *

Earthworms:

Non-toxic to earthworms *

* Based on measurements for a similar formulation.

13. Disposal of Unwanted Product and Used Containers

Consult the local authorities before disposing of unwanted chemical.

Triple-rinse and puncture used containers and dispose of as permitted by local authorities. Do not re-use containers for any purpose.

14. Transport Information

Road Transport:	Environmentally hazardous substance
UN Number:	3082
Class:	9
Proper Shipping Name:	Environmentally hazardous substances, liquid, N.O.S (contains tebuconazole)
CPL Packing Group:	III
IMDG Description:	Marine pollutant

15. Regulatory Information

Hazard symbol: Harmful Xn, Dangerous for the Environment N

Risk phrases: R63 Harmful – possible risk of harm to the unborn child

R36 Irritating to eyes
R50 Very toxic to aquatic organisms
R53 May cause long-term adverse effects in the aquatic environment.

Safety Phrases: S2 Keep out of reach of children
S36/37 Wear suitable protective clothing and gloves
S57 Use appropriate containment to avoid environmental contamination

16. Other Information

The above information is intended to give health and safety guidance on the storage and transport of the substance or product to which it relates. It is not intended to apply to the use of the product, for which purpose the product label and any appropriate technical usage literature available should be consulted and any relevant licences, consents or approvals complied with. The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate to the best of the issuer's available knowledge at the date of publication, and will be updated as and when appropriate. No liability will be accepted for any loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

Headland is a registered trademark of Headland Agrochemicals Ltd.
FATHOM is a product of Cheminova A/S, Lemvig, Denmark

FATHOM is approved by the Chemicals Regulation Directorate for use as a fungicide

Registration Number MAPP XXXXX

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