



# SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Annex II

## Scotia

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Version 1

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R-21191-MAB / MCW 626-n

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

#### Scotia

Synonyms Epoxiconazole Folpet 50 375 SC  
Pure substance/mixture Mixture

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

Recommended Use Fungicide  
Uses advised against No information available

### 1.3. Details of the supplier of the safety data sheet

Supplier Address ADAMA Agricultural Solutions UK Ltd  
Unit 15, Thatcham Buisness Village Colthrop Way,  
Thatcham Berkshire RG19 4LW, UK : 01635 860555  
Fax: 01635 861555

For further information, please contact

Email address ukenquiries@adama.com

### 1.4. Emergency telephone number

Emergency Telephone National Chemical Emergency Centre (UK):  
Tel: 01865 407333 (24 hours)

## Section 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity - Inhalation Category 4 - (H332)  
(Dusts/Mists)  
Serious eye damage/eye irritation Category 2 - (H319)  
Carcinogenicity Category 2 - (H351)  
Reproductive Toxicity Category 1B - (H360Df)  
Acute aquatic toxicity Category 1 - (H400)  
Hazardous to the Aquatic Environment - Chronic Hazard Category 3 - (H412)

### 2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

**Hazard pictograms****Signal word**

Danger

**Hazard Statements**

H319 - Causes serious eye irritation  
 H332 - Harmful if inhaled  
 H351 - Suspected of causing cancer  
 H360Df - May damage the unborn child. Suspected of damaging fertility  
 H400 - Very toxic to aquatic life  
 H412 - Harmful to aquatic life with long lasting effects

**Precautionary Statements**

P102 - Keep out of reach of children  
 P201 - Obtain special instructions before use  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P501 - Dispose of contents/ container to an approved waste disposal plant

**EU Specific Hazard Statements**

EUH208 - Contains Folpet, Methenamine. May produce an allergic reaction  
 EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

**Additional phrases for PPP**

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**

No information available

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.2 Mixture**

Chemical Name	Weight-%	CAS No	EC No	Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	M-Factor	REACH Registration Number
Folpet	31-34	133-07-3	205-088-6	613-045-00-1	Acute Tox. 4 (H332) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Carc. 2 (H351) Aquatic Acute 1 (H400)	M=10	-
Epoxiconazole (ISO)	3-5	133855-98-8	406-850-2	613-175-00-9	Carc. 2 (H351) Repr. 1B (H360Df) Aquatic Chronic 2 (H411)		-
Poly(oxy-1,2-ethanediy l), .alpha.-sulfo-.omega.-[ tris(1-phenylethyl)phenoxy -, ammonium salt	1-2	119432-41-6	-	-	Aquatic Chronic 3 (H412)		-
methenamine	0.5-0.9	100-97-0	202-905-8	612-101-00-2	Flam. Sol. 2 (H228) Skin Sens. 1 (H317)		-

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Full text of H- and EUH-phrases: see section 16

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>General advice</b>	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.
<b>Inhalation</b>	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

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

<b>Symptoms</b>	None known
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### 4.3. Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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## Section 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### **Unsuitable Extinguishing Media**

No information available.

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

No specific hazard known.

### 5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus

In the event of fire and/or explosion do not breathe fumes.

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### For emergency responders

Use personal protection recommended in Section 8.

#### 6.2. Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

#### 6.3. Methods and material for containment and cleaning up

##### Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal.

#### 6.4. Reference to other sections

#### Other Information

See also section 8,13

## Section 7: HANDLING AND STORAGE

#### 7.1. Precautions for safe handling

##### Advice on safe handling

Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation.

##### General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

#### 7.3. Specific end use(s)

##### Risk Management Methods (RMM)

The information required is contained in this Material Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
methenamine 100-97-0			TWA: 4 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup> STEL: 6 mg/m <sup>3</sup>	

#### 8.2. Exposure controls

##### Engineering Controls

Ensure adequate ventilation, especially in confined areas.

##### Personal protective equipment

###### Eye/face protection

Tight sealing safety goggles.

###### Body Protection

Suitable protective clothing, Suitable protective clothing, Apron, Gloves made of plastic or rubber, Rubber boots, Wear impervious protective clothing, including boots, gloves, lab

coat, apron or coveralls, as appropriate, to prevent skin contact.

**General Hygiene Considerations** When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<u>Property</u>	<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Appearance</b>				
	Physical state	: Liquid		
	Color	: opaque white		
	Odor	: Organic		
	Odor threshold	: No data available		
	pH	: 5.7-6.7	CIPAC MT 75.3	solution (1 %)
	Melting point/freezing point °C	: ----		No data available
	Boiling point/boiling range °C	: No data available		
	Flash point °C	: > 79	CIPAC MT 12.2	
	Evaporation rate	: ----		No data available
	Flammability (solid, gas)	: Not applicable for liquids		
	Upper/lower flammability or explosive limits	: No data available		
	Vapor pressure kPa	: ----		Not Applicable
	Vapor density	: No data available		
	Relative density	: 1.2-1.3	CIPAC MT 3.3.2	
	Solubility(ies) mg/l	: ----		Not Applicable
	Partition Coefficient (n-octanol/water) Log Pow	:		See Section 12 for more information
	Autoignition temperature °C	: > 400	EEC A.15	
	Decomposition temperature °C	: No data available		
	Kinematic viscosity mm <sup>2</sup> /s 40 °C	: 61-735	OECD 114	
	Explosive properties	: Not an explosive		
	Oxidizing properties	: Not oxidizing		
<b>9.2. Other information</b>				
	Bulk density g/ml	: ----		Not Applicable
	Surface tension mN/m	: 24.2		

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None under normal processing.

### 10.4. Conditions to avoid

Heat, flames and sparks.

### 10.5. Incompatible materials

No information available

### 10.6. Hazardous decomposition products

None under normal use conditions.

## Section 11: TOXICOLOGY INFORMATION

### 11.1. Information on toxicological effects

#### Acute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: >2000	Rat	OECD 423	
Dermal LD50 mg/kg	: >2000	Rat	OECD 423	
Inhalation LC50 mg/l/4h	: 1.18-1.83	Rat	OECD 403	
Skin corrosion/irritation	: Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	: Irritating to eyes	Rabbit	OECD 405	
Respiratory/skin sensitization	: Not a skin sensitizer	Guinea pig	OECD 406, (M&K test)	

#### Chronic toxicity

##### Germ cell mutagenicity

###### Chemical Name

Folpet	: Not classified
Epoxiconazole (ISO)	: Not classified

##### Carcinogenicity

###### Chemical Name

Folpet	: Suspected of causing cancer
Epoxiconazole (ISO)	: Suspected of causing cancer

##### Reproductive toxicity

###### Chemical Name

Folpet	: Not toxic for the reproductive system
Epoxiconazole (ISO)	: H360Df - May damage the unborn child. Suspected of damaging fertility

##### STOT - single exposure

###### Chemical Name

Folpet	: No data available
Epoxiconazole (ISO)	: No data available

##### STOT - repeated exposure

###### Chemical Name

Folpet	: No data available
Epoxiconazole (ISO)	: No data available

##### Aspiration hazard

###### Chemical Name

Folpet	: No data available
Epoxiconazole (ISO)	: No data available

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity Toxicity

#### Aquatic toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Acute toxicity Fish 96-hour LC50 mg/l	: 0.354	Oncorhynchus	OECD 203	

Crustacea 48-hour EC50 mg/l	: 3.530	mykiss		Static
Algae 72-hour EC50 mg/l	: 0.0375	Daphnia magna	OECD 202	Static
Other plants EC50 mg/l	: ---	D. Subspicatus	OECD 201	No data available

**Terrestrial Toxicity****Birds Oral LD50 mg/kg****Chemical Name**

Folpet	: >2510	Bobwhite quail	EPA 71-1
Epoxiconazole (ISO)	: > 2000	Bobwhite quail	US EPA 71-1

**Bees Oral LD50 µg/bee****Chemical Name**

Folpet	: >236		EPPO 170 (1992)
Epoxiconazole (ISO)	: > 1286		

**12.2. Persistence and degradability Persistence and degradability****Abiotic Degradation** Values Method Remarks**Water DT50 days****Chemical Name**

Folpet	: <0.05	OECD 111	pH 7
Epoxiconazole (ISO)	: 38 - 93	OECD 308	

**Soil DT50 days****Chemical Name**

Folpet	: 4.3	SETAC	25° C
Epoxiconazole (ISO)	: 74		Field

**Biodegradation****Chemical Name**

Folpet	: Readily biodegradable	OECD 301 B
Epoxiconazole (ISO)	: No data available	

**12.3. Bioaccumulative potential Bioaccumulative potential****Partition Coefficient** Values Method Remarks**(n-octanol/water) Log Pow****Chemical Name**

Folpet	: 3.017		20 ° C
Epoxiconazole (ISO)	: 3.3	OECD 117	25° C

**Bioconcentration factor (BCF)****Chemical Name**

Folpet	: 56	OECD 305E
Epoxiconazole (ISO)	: 70	

Low bioaccumulation potential

**12.4. Mobility in soil Mobility in soil****Adsorption/Desorption** Values Method Remarks**Chemical Name**

Folpet	: 304		Koc
Epoxiconazole (ISO)	: 280	OECD 106	Koc

**12.5. Results of PBT and vPvB assessment Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB

**12.6. Other adverse effects Other adverse effects**

No information available.

**Section 13: DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

<b>Waste from residues/unused products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Improper disposal or reuse of this container may be dangerous and illegal.
<b>Other Information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

**Section 14: TRANSPORTATION INFORMATION**

**IMDG/IMO**

<b>14.1 UN/ID No</b>	3082
<b>14.2 Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Epoxiconazole, Folpet )
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing Group</b>	III
<b>14.5 Marine pollutant</b>	Yes
<b>14.6 Special precautions for user</b>	

**RID/ADR**

<b>14.1 UN/ID No</b>	3082
<b>14.2 Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Epoxiconazole, Folpet )
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing Group</b>	III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special precautions for user</b>	

**ICAO/IATA**

<b>14.1 UN/ID No</b>	3082
<b>14.2 Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Epoxiconazole, Folpet )
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing Group</b>	III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special precautions for user</b>	
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not Applicable



**Section 15: REGULATORY INFORMATION**

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



**15.2. Chemical safety assessment**

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required. A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009.

**Section 16: OTHER INFORMATION****Full text of H-Statements referred to under sections 2 and 3**

H228 - Flammable solid  
H317 - May cause an allergic skin reaction  
H412 - Harmful to aquatic life with long lasting effects  
H332 - Harmful if inhaled  
H319 - Causes serious eye irritation  
H351 - Suspected of causing cancer if inhaled  
H400 - Very toxic to aquatic life  
H360Df - May damage the unborn child. Suspected of damaging fertility  
H411 - Toxic to aquatic life with long lasting effects

**Revision Note** \*\*\* - Change from previous version.

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet