



SAFETY DATA SHEET

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

Soratel

Revision date 10-May-2023

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Product Code(s)

FNG56955-44

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Soratel

Other means of identification

Synonyms

Prothioconazole 250 EC

Pure substance/mixture

Mixture

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

Recommended use

Fungicide; Professional use

Uses advised against

No information available

1.3. Details of the supplier of the safety data sheet

Supplier

ADAMA Agricultural Solutions UK Ltd

Third Floor East

1410 Arlington Business Park

Theale

READING

RG7 4SA

Tel: 01635 860555

Fax: 01635 861555

For further information, please contact

E-mail address

ukenquiries@adama.com

1.4. Emergency telephone number

Emergency Telephone

UK: National Chemical Emergency Centre:

Tel: 01856 407333 (24 hours, 7 days a week)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity - Oral	Category 4 - (H302)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitisation	Category 1 - (H317)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements

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

Contains: Acetophenone

Hazard pictograms**Signal word**

Warning

Hazard statements

H302 - Harmful if swallowed
 H317 - May cause an allergic skin reaction
 H319 - Causes serious eye irritation
 H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements

P102 - Keep out of reach of children
 P270 - Do not eat, drink or smoke when using this product
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P410 - Protect from sunlight
 P501 - Dispose of contents/ container to an approved waste disposal plant

EU Specific Hazard Statements

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**PBT & vPvB**

The product does not contain any substance(s) classified as PBT or vPvB.

Endocrine Disruptor Information

None known.

Persistent Organic Pollutants

Not applicable.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

Chemical name	CAS No	EC No	Index No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	REACH Registration Number
Acetophenone	98-86-2	202-708-7	606-042-00-1	31 -35	Acute Tox. 4			01-211953316

					(H302) Eye Irrit. 2 (H319)			9-37-0002
Prothioconazole	178928-70-6	605-841-2	613-337-00-9	20 - 24	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		M = 10 M = 1	No data available
Poly(oxy-1,2-ethanediy l), alpha.-phenyl-.omega. -hydroxy-, styrenated	104376-75-2	-		14 - 18	Aquatic Chronic 3 (H412)			No data available
1-Octyl-2-pyrrolidinone	2687-94-7	403-700-8	613-098-00-0	12 - 16	Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)			01-000001533 5-74-0000

Acute toxicity estimates (ATEs) according to Part 3 of Annex VI to Regulation (EC) No 1272/2008 are indicated in this table, if available.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). First aider: Pay attention to self-protection.
Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a doctor.
Eye contact	Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a doctor.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a doctor if necessary.
Ingestion	Rinse mouth. Drink plenty of water. If symptoms persist, call a doctor.
Self-protection of the first aider	Use personal protective equipment as required.

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

Symptoms	None known.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Product is or contains a sensitiser. May cause sensitisation by skin contact.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

Derived No Effect Level (DNEL) No information available.
Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls**Engineering controls**

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment
Eye/face protection**

Wear safety glasses with side shields (or goggles).

Hand protection

Wear suitable gloves.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

Environmental exposure controls

Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Appearance			
Physical state	: Liquid		
Colour	: Yellowish		
Odour	: No information available		
Odour threshold	: No data available		
pH	: 6.5 - 7.5		
Melting point / freezing point °C	: ----		Not applicable
Boiling point / boiling range °C	: ----		No data available
Flash point °C	: 94.4	EEC A.9	
Evaporation rate	: No data available		
Flammability (solid, gas)	: Not applicable		
Upper/lower flammability or explosive limits	: No data available		
Vapour pressure kPa	: ----		Not applicable
Vapour density	: No data available		
Relative density	: 1.03 - 1.13	EEC A.3	
Solubility(ies) mg/l	: No data available		
Partition coefficient Log Pow	:		See Section 12 for additional Ecological Information

Autoignition temperature °C	: ----		No data available
Decomposition temperature °C	: ----		No data available
Kinematic viscosity mm ² /s 40 °C	: 24.1	OECD 114	
Surface tension	: No data available		
Particle Size	: Not applicable		

9.2. Other information

Bulk density g/ml : Not applicable

9.2.1. Information with regards to physical hazard classes

Explosive properties : Not an explosive
Oxidising properties : Not oxidizing

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition can lead to release of irritating and toxic gases and vapours.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: 1030	Rat	OECD 425	female
Dermal LD50 mg/kg	: > 2000	Rat	OECD 402	female
Inhalation LC50 mg/l	: 5.02	Rat	OECD 403	
Skin corrosion/irritation	: Mild skin irritant	Rabbit	OECD 404	
Serious eye damage/eye irritation	: Irritating to eyes	Rabbit	OECD 405	

Sensitisation : Skin sensitiser Mouse OECD 429

Chronic toxicity

Germ cell mutagenicity

Chemical name

Prothioconazole : Not classified

Carcinogenicity

Chemical name

Prothioconazole : Not Carcinogenic

Reproductive toxicity

Chemical name

Prothioconazole : Not toxic for the reproductive system

STOT - Single Exposure

Chemical name

Prothioconazole : Not classified

STOT - Repeated Exposure

Chemical name

Prothioconazole : Not classified

Aspiration hazard

Chemical name

Prothioconazole : Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

<u>Acute toxicity</u>	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	: 2.49	Rainbow trout	OECD 203	
Crustacea 48-hour EC50 mg/l	: 8.53	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	: 3.27	P. subcapitata	OECD 201	
Other plants EC50 mg/l	: 1.15	Lemna gibba	OECD 221	

<u>Chronic aquatic toxicity</u>	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish NOEC mg/l	: No data available			
Crustacea NOEC mg/l	: No data available			
Algae NOEC mg/l	: No data available			
Other plants NOEC mg/l	: No data available			

Terrestrial Toxicity

Birds Oral LD50 mg/kg

Chemical name

Prothioconazole : > 2000 Bobwhite quail

Bees Oral LD50 µg/bee

Chemical name

Prothioconazole : > 71 Apis mellifera OECD 213

12.2. Persistence and degradability**Abiotic Degradation****Water DT50 days****Chemical name**

Prothioconazole : 0.8 - 1.0

Soil DT50 days**Chemical name**

Prothioconazole : 2.8

Biodegradation**12.3. Bioaccumulative potential****Partition Coefficient****(n-octanol/water) Log Pow****Chemical name**

Values	Method	Remarks
Prothioconazole : 3.82		pH 7; 20 ° C

Bioconcentration factor (BCF)**Chemical name**

Prothioconazole : 19.7

12.4. Mobility in soil**Adsorption/Desorption****Chemical name**

Values	Method	Remarks
Prothioconazole : ----		No data available

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Waste from residues/unused products**

Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal.

Other information

Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information**ADR****14.1 UN number**

UN3082

14.2 UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole)

14.3 Transport hazard class(es)

9

14.4 Packing group

III

Description

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole), 9, III, (-)

14.5 Environmental hazard Yes
 14.6 Special Precautions for Users
 Special Provisions 274, 335, 601, 375
 Classification code M6
 Tunnel restriction code (-)

RID

14.1 UN number UN3082
 14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole)
 14.3 Transport hazard class(es) 9
 14.4 Packing group III
 Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole), 9, III

Environmental hazard Yes
 Special Precautions for Users
 14.5 Environmental hazard Yes
 14.6 Special Precautions for Users
 Special Provisions 274, 335, 375, 601
 Classification code M6

IMDG

14.1 UN number UN3082
 14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole)
 14.3 Transport hazard class(es) 9
 14.4 Packing group III
 Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole), 9, III, Marine pollutant

14.5 Environmental hazard Yes
 14.6 Special Precautions for Users
 14.5 Marine pollutant P
 Environmental hazard Yes
 14.6 Special Precautions for Users
 Special Provisions 274, 335, 969
 EmS-No F-A, S-F
 IMDG Stowage and segregation Category A No information available
 14.7 Maritime transport in bulk according to IMO instruments No information available

IATA

14.1 UN number UN3082
 14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole)
 14.3 Transport hazard class(es) 9
 14.4 Packing group III
 Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole), 9, III
 14.5 Environmental hazard Yes
 14.6 Special Precautions for Users
 Special Provisions A97, A158, A197
 ERG Code 9L



* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations**

Trade name / designation	Registration Number(s)	Date
Not Applicable	Not Applicable	Not Applicable

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

15.2. Chemical safety assessment

Chemical Safety Report A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H302 - Harmful if swallowed
 H314 - Causes severe skin burns and eye damage
 H318 - Causes serious eye damage
 H319 - Causes serious eye irritation
 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
 H412 - Harmful to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Revision date 10-May-2023

Reason for revision SDS sections updated

Abbreviations and acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS Number - Chemical Abstracts Service number
EC Number - EINECS and ELINCS Number
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
OECD - Organization for Economic Co-operation and Development
PBT - Persistent, Bioaccumulative and Toxic substance
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT - Specific Target Organ Toxicity
vPvB - Very Persistent and Very Bioaccumulative

Classification according to Regulation (EC) No. 1272/2008 [CLP]**Classification of the mixture**

H302 - Harmful if swallowed
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H411 - Toxic to aquatic life with long lasting effects

Classification procedure

Classification based on test data
Classification based on test data
Classification based on test data
Classification based on Calculation method

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

Disclaimer

The information provided in this 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