



# SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH), as amended by UK REACH Regulations SI 2019/758

## Soratel

Revision date 12-Dec-2024

Version 5 Supersedes Date: 10-May-2023

Product Code(s)

FNG56955-44

Print Date 12-Dec-2024

ADM.03500.F.2.B

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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 GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
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 GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567**

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  
 H332 - Harmful if inhaled  
 H411 - Toxic to aquatic life with long lasting effects

**Precautionary Statements**

P102 - Keep out of reach of children  
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
 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  
 P304 + P340 - IF INHALED: Remove person to fresh air and keep 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  
 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	Specific	M-Factor	REACH
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					according to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567	concentration limit (SCL)		Registration Number
Acetophenone	98-86-2	202-708-7	606-042-00-1	31 -35	Acute Tox. 4 (H302) Eye Irrit. 2 (H319)			01-211953316 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-ethanediyl), 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

<b>General advice</b>	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.
<b>Inhalation</b>	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a doctor.
<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a doctor if necessary.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. If symptoms persist, call a doctor.
<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

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

<b>Note to doctors</b>	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.

**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>
<b>Appearance</b>			
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 <sup>2</sup> /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	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	FIFRA 71-1
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**Bees Oral LD50 µg/bee****Chemical name**

Prothioconazole	:	> 71	Apis mellifera	OECD 213
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**12.2. Persistence and degradability****Abiotic Degradation****Water DT50 days****Chemical name**

Prothioconazole	:	0.8 - 1.0	OECD 308
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**Soil DT50 days****Chemical name**

Prothioconazole	:	2.8	OECD 307
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**Biodegradation****12.3. Bioaccumulative potential****Partition Coefficient****(n-octanol/water) Log Pow****Chemical name**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>	
Prothioconazole	:	3.04	OECD 117	pH 7; 20 °C

**Bioconcentration factor (BCF)****Chemical name**

Prothioconazole	:	19.7	OECD 305
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**12.4. Mobility in soil****Adsorption/Desorption****Chemical name**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>	
Prothioconazole	:	1765	OECD 312	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 substances, 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**

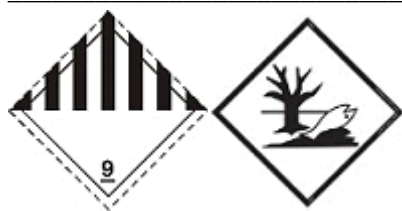
14.1 UN number	UN3082
14.2 UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Prothioconazole)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole), 9, III
Environmental hazard	Yes
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 substances, liquid, n.o.s. (Prothioconazole)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, Environmentally hazardous substances, 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 substances, liquid, n.o.s. (Prothioconazole)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, Environmentally hazardous substances, liquid, n.o.s. (Prothioconazole), 9, III
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	A97, A158, A197, A215
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

<b>Chemical Safety Report</b>	A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009
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## 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 12-Dec-2024

Reason for revision Classification according to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Further information This material safety data sheet complies with the provisions of Regulation (EC) No 1907/2006, as amended by Regulation (EU) 2020/878.

**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 GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567****Classification of the mixture**

H302 - Harmful if swallowed  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H332 - Harmful if inhaled  
 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 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