



# Safety Data Sheet

Issue Date: 20-Jan-2023

Revision Date: 16-May-2024

Version 3

## 1. IDENTIFICATION

### Product identifier

**Product Name** Soratel

### Other means of identification

**SDS #** ADAMA-346-CA

**Synonyms** None

**Registration Number(s)** 34155 (Pest Control Products Act)

**UN/ID No** UN3267

### Recommended use of the chemical and restrictions on use

**Recommended Use** Fungicide

**Uses Advised Against** No information available

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

#### Initial supplier identifier

ADAMA Agricultural Solutions Canada Ltd.  
300-191 Lombard Avenue  
Winnipeg, Manitoba R3B 0X1  
1-855-264-6262

### Emergency telephone number

**Emergency Telephone** For fire, spill and/or leak contact INFOTRAC:  
1-800-535-5053 (North America) 1-352-323-3500 (International)  
For medical emergencies and health/safety inquiries, contact ProPharma Group:  
1-877-250-9291

## 2. HAZARDS IDENTIFICATION

**Emergency Overview** This chemical is a product registered by the Canadian Pest Control Products Act and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-PCPA registered chemicals. Please see Section 15 for additional information. This product has been classified according to Canada's Hazardous Product Regulations (WHMIS 2015).

**Appearance** Yellow liquid

**Physical state** Liquid

**Classification**

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

**Signal word****Danger****Hazard statements**

Harmful if swallowed

Causes severe skin burns and eye damage

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dusts or mists

Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Immediately call a poison centre or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a poison centre or doctor/physician

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a poison centre or doctor/physician

IF SWALLOWED: rinse mouth. Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Information**

Very toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Not applicable.

#### Mixture

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Acetophenone	98-86-2	31-34	-	-
Prothioconazole	178928-70-6	20-26	-	-
2-Pyrrolidinone, 1-octyl-	2687-94-7	10-15	-	-

### 4. FIRST AID MEASURES

#### Description of first aid measures

<b>General advice</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<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. Seek medical attention.
<b>Skin contact</b>	In case of contact, immediately wash skin with soap and water or water for at least 15 minutes. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen if breathing is difficult. If breathing has stopped, give artificial respiration. Seek medical advice. Seek medical attention for further treatment.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. Call a doctor or poison control centre immediately.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

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

**Symptoms** Harmful if swallowed. Causes severe skin burns and eye damage.

#### Indication of any immediate medical attention and special treatment needed

**Note to doctors** Treat symptomatically.

### 5. FIREFIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.
<b>Unsuitable extinguishing media</b>	Not determined.
<b>Specific hazards arising from the chemical</b>	No information available.
<b>Hazardous combustion products</b>	Smoke, fumes or vapors, and oxides of carbon.

**Explosion Data**

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

### Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so. Dike far ahead of spill: use dry sand to contain the flow of material.

**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Transfer contaminated absorbent, soil, and other materials to containers for disposal. For waste disposal, see section 13 of the SDS.

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

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Use personal protective equipment as required. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Use only with adequate ventilation. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapours or mists. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment. Open and handle container with care.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Protection from freezing is recommended. Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Keep/store only in original container and out of direct sunlight. Do not use food or drink containers for mixing or storage. Keep away from heat, sparks and open flame. Keep away from food, drink, seeds and animal feeding stuffs.

**Incompatible materials** None known

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Limits

Chemical name	Canada - Alberta - Occupational Exposure Limits - Ceilings	Canada - British Columbia - Occupational Exposure Limits - Ceilings	Canada - Ontario - Occupational Exposure Limits - Ceilings	Quebec
Acetophenone 98-86-2	TWA: 10 ppm TWA: 49 mg/m <sup>3</sup>	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm TWA: 49 mg/m <sup>3</sup>

### Appropriate engineering controls

#### Engineering controls

Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Use splash goggles or face shield when contact may occur.

#### Skin and body protection

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Viton or other impervious gloves are required. Long-sleeved shirt, long pants, socks and shoes are suggested as the minimum work clothes requirement.

#### Respiratory protection

Ensure adequate ventilation, especially in confined areas. Wear an appropriate NIOSH/MSHA approved respirator if ventilation is inadequate.

#### Environmental exposure controls

Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains.

#### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink or smoke while using this product. Promptly remove all contaminated clothing and wash it before reuse. Wash or discard contaminated clothing. Discard contaminated leather items. Wash face, hands and any exposed skin area thoroughly after handling. Discard clothing and other absorbent materials that have been soaked or heavily contaminated with this product's concentrate. Do not reuse them. Follow the manufacturer's instructions for cleaning and maintaining PPE. If there are no such instructions for washable products, use detergent and hot water. Keep and wash PPE separately from other clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Yellow liquid
<b>Colour</b>	Yellow
<b>Odour</b>	Not determined
<b>Odour Threshold</b>	Not determined

#### Property

<b>pH</b>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting point / freezing point</b>	6.5-7.5 (1% aqueous solution)	
<b>Initial boiling point and boiling range</b>	No data available	
<b>Flash point</b>	94.4 °C / 201.9 °F	

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-Not applicable	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapour Pressure	Not determined	
Vapour Density	No data available	
Relative Density	1.03-1.13 g/mL	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	No data available	
Decomposition temperature	Not determined	
Kinematic Viscosity	26 mm <sup>2</sup> /s	
Dynamic Viscosity	Not determined	
Explosive properties	Not an explosive.	
Oxidising properties	Not an oxidizer.	
<u>Other information</u>		
Softening Point	Not determined	
Molecular weight	Not determined	
VOC content	No data available	
Liquid Density	Not determined	
Bulk density	Not determined	

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	Not reactive under normal conditions.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Hazardous Polymerisation</b>	Hazardous polymerisation does not occur.
<b>Conditions to Avoid</b>	Heat, flames and sparks. Extreme temperatures and direct sunlight. Exposure to air or moisture over prolonged periods. Refer to Section 7.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	Thermal decomposition can lead to release of irritating and toxic gases and vapours.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Eye contact</b>	Avoid contact with eyes.
<b>Skin contact</b>	Avoid contact with skin.
<b>Inhalation</b>	Do not inhale.
<b>Ingestion</b>	Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Acute toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	>300
<b>ATEmix (dermal)</b>	7,517.10
<b>ATEmix (inhalation-dust/mist)</b>	315.24

**Unknown acute toxicity** No information available

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acetophenone 98-86-2	= 900 mg/kg ( Rat )	= 3300 mg/kg ( Rat )	> 2.130 mg/L ( Rat ) 8 h
Prothioconazole 178928-70-6	> 6200 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	> 5 mg/L ( Rat ) 4 h
2-Pyrrolidinone, 1-octyl- 2687-94-7	= 2050 mg/kg ( Rat )	> 4000 mg/kg ( Rat )	-

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Causes severe skin burns.

**Serious eye damage/eye irritation** Causes severe eye damage.

**Carcinogenicity** Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

## 12. ECOLOGICAL INFORMATION

**Marine Pollutant** Yes.

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Acetophenone 98-86-2	-	LC50: =162mg/L (96h, Pimephales promelas) LC50: =155mg/L (96h, Pimephales promelas)	EC50 = 15.5 mg/L 15 min	-

**Persistence/Degradability** No information available.

**Bioaccumulation** No information available.

**Mobility**

Chemical name	Partition coefficient
Acetophenone 98-86-2	1.65
2-Pyrrolidinone, 1-octyl- 2687-94-7	4.15

Other adverse effects No information available.

### 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

### 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances

#### DOT

**UN/ID No** UN3267  
**Proper Shipping Name** Corrosive liquid, basic, organic, n.o.s. (2-Pyrrolidinone)  
**Transport hazard class(es)** 8  
**Packing Group** II  
**Marine Pollutant** Yes.

#### TDG

**UN/ID No** UN3267  
**Proper Shipping Name** Corrosive liquid, basic, organic, n.o.s. (2-Pyrrolidinone)  
**Transport hazard class(es)** 8  
**Packing Group** II  
**Marine Pollutant** Yes.

#### MEX

**UN/ID No** UN3267  
**Proper Shipping Name** Corrosive liquid, basic, organic, n.o.s. (2-Pyrrolidinone)  
**Transport hazard class(es)** 8  
**Packing Group** II

#### IATA

**UN number or ID number** UN3267  
**Proper Shipping Name** Corrosive liquid, basic, organic, n.o.s. (2-Pyrrolidinone)  
**Transport hazard class(es)** 8  
**Packing group** II

#### IMDG

**UN number or ID number** UN3267  
**Proper Shipping Name** Corrosive liquid, basic, organic, n.o.s. (2-Pyrrolidinone)  
**Transport hazard class(es)** 8  
**Packing Group** II  
**Marine Pollutant** Yes

### 15. REGULATORY INFORMATION

#### REGULATORY INFORMATION

##### International Regulations

**Ozone-depleting substances (ODS)** Not applicable



The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

#### International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AIC
Acetophenone	X	X	X	X	X	X	X	X
Prothioconazole	X							
2-Pyrrolidinone, 1-octyl-	X	X	X	X	X		X	X

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

**NFPA**  
**HMIS**

Health hazards -  
Health hazards -

Flammability 1  
Flammability 1

Instability -  
Physical hazards -

Special hazards -  
Personal Protection Not  
determined

#### 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: 16-May-2024

Revision Note: New format.

#### 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**