


## Safety Data Sheet

# SOVRIN WP

Reg. No: L 7600 (Act No 36 of 1947)

1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	SOVRIN WP
Other means of identification:	Dimethomorph 500 g/kg WP
Chemical Name:	(E,Z)-4-[3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)acryloyl]morpholine (IUPAC)
Recommended use:	Fungicide
Restrictions on use:	Agriculture
UN No:	Not regulated
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056 www.agritech.co.za
Emergency Number:	POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 TYGERBERG:021 931 6129 RED CROSS 021 689 5227 GRIFFON POISON CENTRE: 082 446 8946.
2) HAZARDS IDENTIFICATION	
Classification of the substance/mixture:	Acute Toxicity (Oral) Category 5 Acute Toxicity (Dermal) Category 5 Acute Toxicity (Inhalation) Category 4 Skin Irritation Category 3 Eye Damage Category 1 STOT RE Category 3 Aquatic Chronic Category 2
Label Elements: Globally Harmonized System, EU (GHS):	<p>Pictograms:</p>  <p>Signal Word: Danger</p> <p><b>Hazard Statements:</b>  H228: Flammable solid.  H302: Harmful if swallowed.  H315: Causes skin irritation.  H318: Causes serious eye damage.  H332: Harmful if inhaled.  H335: May cause respiratory irritation.  H411: Toxic to aquatic life with long lasting effects.  H412: Harmful to aquatic life with long lasting effects.</p> <p><b>Precautionary Statements:</b>  P201: Obtain special instructions before use.  P202: Do not handle until all safety precautions have been read and understood.  P260: Do not breathe dust/mist/spray.  P262: Do not get in eyes, on skin, or on clothing.  P270: Do not eat, drink or smoke when using the product.</p>

According to Directive 67/548/EEC No. 1272/2008 [CLP]

**P272:** Contaminated work clothing should not be allowed out of the workplace.  
**P273:** Avoid release to the environment.  
**P280:** Wear protective gloves, protective clothing, eye protection.  
**P321:** Specific treatment (See First aid measures on this label)  
**P362+P364:** Take off contaminated clothing and wash it before reuse.  
**P405:** Store locked up.

**Hazard Symbol(s):**

Xn – Harmful  
 N – Dangerous for the environment  
 F+ - Flammable (individual components; see below)  
 Xi – Irritant

**Risk – Phrase(s):**

**R22:** Harmful if swallowed.  
**R36:** Irritating to eyes.  
**R41:** Risk of serious damage to eyes  
**R51:** Toxic to aquatic organisms  
**R53:** May cause long-term adverse effects in the aquatic environment.

**Safety – Phrase(s):**

**S1/2:** Keep locked up and out of the reach of children.  
**S28:** After contact with skin, wash immediately with plenty of water.  
**S36:** Wear suitable protective clothing.  
**S60:** This material and its container must be disposed of as hazardous waste.  
**S61:** Avoid release to the environment.

**3) COMPOSITION / INFORMATION ON INGREDIENTS**

**3.1 Substances:**

Not applicable

**3.2 Mixtures:**

Chemical name	Concentration	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)
Dimethomorph	500 g/kg	110488-70-5	404-200-2	Aquatic Chronic 2 (H411)
Sodium dodecyl sulphate	4%	151-21-3	205-788-1	Acute Tox 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412) Flam. Sol. 2 (H228) Acute Tox 4 (H332) STOT SE 3 (H335, inhalation)

**4) FIRST AID MEASURES**

**Description of First-Aid Measures:**

**Inhalation:**

Remove victim to well ventilated area and loosen clothing around the neck. Keep person warm and at rest. If breathing is difficult, give oxygen. If breathing has stopped, perform artificial respiration. Get medical attention if necessary.

**Skin contact:**

Strip off all contaminated clothing and thoroughly wash body with soap and water. Persons providing first aid must wear gloves to avoid self-contamination. Get medical attention if necessary.

**Eye contact:**

Flush eyes with clean water for at least 15 minutes holding eyelids apart and call a physician immediately. Use safety goggles.

**Ingestion:**

If swallowed **DO NOT** induce vomiting unless advised to do so by a medical practitioner. If vomiting occurs spontaneously, keep airways clear. Never give anything per mouth to an unconscious person. Seek medical attention immediately and show this data sheet.

Most important symptoms and effects, both acute and delayed:	None known.										
Indication of any immediate medical attention and special treatment needed:	Symptomatic treatment and supportive therapy as indicated.										
5) FIRE-FIGHTING MEASURES											
Extinguishing Media:	For small fires: Dry chemical foam or standard foam, carbon dioxide. For large fires: Foam or water-fog. Water can be used for cooling of unaffected stock, but avoid the accumulation of polluted run-off from the site. Contain fire control water for later disposal.										
Unsuitable Extinguishing Media:	Do not use high volume water jet, due to contamination risk.										
Specific Hazards arising from the substance/mixture:	Fire may generate poisonous, explosive and corrosive fumes. Keep upwind.										
Fire Fighting:	Remove container/s from fire area if possible. If area is heavily exposed to fire and if conditions permit, let the fire burn itself out since water may increase the area contaminated (on small fires). Cool containers/tanks with spray water. Avoid inhaling vapours by keeping upwind. Contain fire control water for later disposal.										
Protective clothing:	Fire-fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus										
6) ACCIDENTAL RELEASE MEASURES											
Personal precautions, protective equipment and emergency procedures:	Wear personal protective clothing according to operator safety during removal of spillage. Wear eye protection, chemically resistant gloves, boots and coveralls.										
Environmental precautions:	Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.										
Methods and material for containment and cleaning up:	Remove all sources of flames and sparks. Soak up with an inert absorptive material such as sand, soil, diatomaceous earth, etc. Prevent product from spreading and collect into specially marked, tightly closing containers. Spilled product cannot be used further and must be disposed of. If safe disposal is not possible, contact the manufacturer, the dealer or local representative. Do not contaminate waters and sewers. Heavily contaminated soil layers should be removed and disposed of in an approved way. Notify regulatory authorities if necessary.  Spilled product cannot be re-used and must be disposed of by incineration or disposal in a chemical waste disposal facility. If containers cannot be recycled, they should be disposed of together with the waste chemical.										
7) HANDLING & STORAGE											
Precautions for Safe Handling:	Wear appropriate personal protective equipment. Wash thoroughly and change clothes after handling. Observe all warnings and precautions listed for the product.										
Conditions for Safe Storage, including any incompatibilities:	Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilizers and seeds. Keep away from children or uninformed persons.										
8) EXPOSURE CONTROL / PERSONAL PROTECTION											
Appropriate Engineering Controls:	It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.										
Control Parameters: Occupational exposure limits:	<table><tr><td>Ingredient</td><td>CAS#</td><td>Limit</td><td>Basis</td></tr><tr><td>Sodium dodecyl sulphate</td><td>151-21-3</td><td>4 mg/m<sup>3</sup></td><td>TWA (EH40/2005)</td></tr></table>			Ingredient	CAS#	Limit	Basis	Sodium dodecyl sulphate	151-21-3	4 mg/m <sup>3</sup>	TWA (EH40/2005)
Ingredient	CAS#	Limit	Basis								
Sodium dodecyl sulphate	151-21-3	4 mg/m <sup>3</sup>	TWA (EH40/2005)								

<p><b><u>PERSONAL PROTECTIVE EQUIPMENT:</u></b>  <b>Clothing:</b></p> <p><b>Gloves:</b></p> <p><b>Eye protection:</b></p> <p><b>Emergency eye wash:</b></p>	<p>Employee must wear appropriate protective (impervious) clothing and full-face respirator to prevent skin contact with this substance.</p> <p>Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance.</p> <p>The use of safety goggles or full-face shield is recommended.</p> <p>Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.</p>
<b>9) PHYSICAL &amp; CHEMICAL PROPERTIES</b>	
<b>Form:</b>	Wettable powder
<b>Colour:</b>	Light brown
<b>Odour:</b>	Slight sweetish odour
<b>Solubility:</b>	Dispersible in water
<b>pH:</b>	7.86
<b>Odour threshold:</b>	Not available
<b>Melting point / Freezing point</b>	Approx. 125 – 149 (active ingredient)
<b>Initial boiling point and boiling range</b>	Not available
<b>Flash point:</b>	Not applicable
<b>Evaporation rate:</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Upper/ lower flammability or explosive limits:</b>	Not available
<b>Vapour pressure:</b>	Negligible
<b>Vapour density:</b>	Not available
<b>Relative density:</b>	1.127 g/ml
<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available
<b>Viscosity:</b>	Not applicable
<b>10) STABILITY &amp; REACTIVITY</b>	
<p><b>Reactivity:</b></p> <p><b>Chemical Stability:</b></p> <p><b>Possibility of hazardous reactions:</b></p> <p><b>Conditions to avoid:</b></p> <p><b>Incompatible materials:</b></p> <p><b>Hazardous decomposition product(s):</b></p>	<p>Stable under normal storage conditions.</p> <p>When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Incompatible or can react with bases.</p> <p>None known.</p> <p>Avoid all sources of ignition: heat, sparks, open flames. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures.</p> <p>Strong acids, strong bases, strong oxidizing agents.</p> <p>Fire may generate poisonous, explosive and corrosive fumes.</p>
<b>11) TOXICOLOGICAL INFORMATION</b>	
<p><b>Acute Toxicity:</b>  <b>Oral:</b>  <b>Dermal:</b>  <b>Inhalation:</b></p>	<p>LD50 &gt; 3 000 mg/kg, rat.  LD50 &gt; 5 000 mg/kg, rat.  LC50 4h &gt; 4.2 mg/L, rat.</p>
<b>Skin Corrosion/Irritation:</b>	Not an irritant, rabbit.
<b>Serious Eye Damage/Irritation:</b>	Not an irritant, rabbit.
<b>Respiratory or Skin Sensitization:</b>	Animal test did not cause sensitization by skin contact, guinea pig.
<b>Germ Cell Mutagenicity:</b>	No data available.
<b>Carcinogenicity:</b>	No data available.
<b>Reproductive Toxicity:</b>	No data available.
<b>STOT-SE:</b>	May cause respiratory irritation.
<b>STOT-RE:</b>	No data available.
<b>Aspiration Hazard:</b>	No data available.

<b>12) ECOLOGICAL INFORMATION</b>	
<b>Ecotoxicity:</b>	
<b>Birds:</b>	LD50 Bobwhite quail & Mallard duck > 2000 mg/kg. Dietary LC50 (5d) Bobwhite quail and Mallard ducklings > 5000 mg/kg diet.
<b>Fish:</b>	LC50 (96h) Rainbow trout > 6 mg/L, Bluegill sunfish 25 mg/L.
<b>Daphnia:</b>	EC50 (48h) > 10 mg/L.
<b>Algae:</b>	EC50 (96h) <i>Scenedesmus subspicatus</i> 29.2 mg/L.
<b>Worms:</b>	EC <sub>50</sub> earthworms > 1000 mg/kg soil.
<b>Bees:</b>	Oral LD50 (48h) >30 µg/bee, Contact >100 µg/bee.
<b>Persistence and Degradability:</b>	Aerobic soil metabolism DT <sub>50</sub> 41–96 days (20 °C). Field dissipation DT <sub>50</sub> 34–53 days. Water/sediment DT <sub>50</sub> 5–15 days, 16–59 days (total system).
<b>Bio-accumulative Potential:</b>	No evidence of accumulation.
<b>Mobility in Soil:</b>	Moderately mobile, K <sub>d</sub> 2.09–11.67 mL/g, K <sub>oc</sub> 290–566.
<b>13) DISPOSAL CONSIDERATIONS</b>	
<b>Waste Disposal:</b>	Waste should not be re-used. Do not contaminate water, food or feed by disposal. Open dumping or burning of this pesticide is prohibited. Wastes resulting from the use of this product may be disposed of by incineration or at an approved chemical waste disposal facility.
<b>Container Disposal:</b>	Refer to the product label for instructions. Container Refilling and Disposal: If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product. Add rinsing to the contents of the spray tank before destroying the container in the prescribed manner. <b>DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.</b> If containers cannot be recycled, they should be disposed of together with the waste chemical.
<b>14) TRANSPORTATION INFORMATION</b>	
<b>Road Transport ADR / IRD:</b>	Not regulated.
<b>Maritime Transport IMDG / IMO:</b>	Not regulated.
<b>Air Transport ICAO / IATA:</b>	Not regulated.
<b>Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code):</b>	No transport in bulk according to the IBC Code.
<b>15) REGULATORY INFORMATION</b>	
<b>Safety, health and environmental regulations/legislation specific for the substance/mixture:</b>	For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)
<b>Chemical Safety Assessment:</b>	Advice on product handling can be found in sections 7 and 8 of this safety data sheet.
<b>16) OTHER INFORMATION</b>	
<p>All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.</p> <p>It is the responsibility of persons in receipt of this SDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with this product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this SDS to their own SDS.</p> <p>The information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. A properly trained person using this product intends this document only as a guide to the appropriate handling of the material. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.</p> <p>MERIDIAN AGRITECH MAKES NO REPRESENTATION OR WARRANTIES, EITHER EXPRESSES OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANT ABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MERIDIAN AGRITECH (PTY) LTD WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.</p> <p>Date of issue: 26/08/2007 Date of revision: 22/04/2016; 02/02/2021</p>	

**Abbreviations and acronyms:**

1. CAS number: Chemical Abstracts Service number.
2. CLP: Classification, Labelling, Packaging.
3. LD<sub>50</sub>: Lethal Dose for 50% of the test population.
4. LC<sub>50</sub>: Lethal Concentration for 50% of the test population.
5. DT<sub>50</sub>: Half-life.
6. GHS: Globally Harmonised System (of Classification and Labelling of Chemicals).
7. STOT: Specific Target Organ Toxicity
8. SE: Single exposure
9. RE: Repeated exposure
10. TWA: Time-weighted average.

**Literature References:**

- GHS: [www.ccohs.ca/oshanswers/chemicals/ghs.html](http://www.ccohs.ca/oshanswers/chemicals/ghs.html)
- ECHA: <https://echa.europa.eu/search-chemicals>