


Safety Data Sheet

VALEO 500 SC - Reg. No: L 9086 (Act No 36 of 1947)

1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	VALEO 500 SC
Other means of identification:	Folpet 500 SC
Chemical Name:	<i>N</i> -(trichloromethylthio)phthalimide; <i>N</i> (trichloromethanesulphenyl)phthalimide (IUPAC)
Recommended use:	Fungicide
Restrictions in use:	Agriculture
UN No:	3082
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 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
2) HAZARDS IDENTIFICATION:	
Classification of the substance/mixture:	Eye Irritation Category 2 Skin Sensitization Category 1 Skin Corrosion/Irritation Category 3 Acute Toxicity (Oral) Category 4 Acute Toxicity (Dermal) Category 3 Acute Toxicity (Inhalation) Category 2 Carcinogenicity Category 1B Aquatic Acute Category 1
Label Elements: Globally Harmonized System, EU (GHS):	Pictograms:  Signal word: Danger <u>Hazard Statements:</u> H301: Toxic if swallowed. H302: Harmful if swallowed. H311: Toxic in contact with skin. H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H331: Toxic if inhaled. H332: Harmful if inhaled. H341: Suspected of causing genetic defects.

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

H350: May cause cancer.
H351: Suspected of causing cancer.
H400: Very toxic to aquatic life.

Precautionary Statements:

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P260: Do not breathe mist/fumes/vapours/spray.
P262: Do not get in eyes, on skin, or on clothing.
P270: Do not eat, drink or smoke when using the product.
P271: Use only outdoors or in a well-ventilated area.
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 Symbols:

Xn: Harmful
N: Dangerous for the environment.

R-phrase(s):

R20: Harmful by inhalation.
R36: Irritating to eyes.
R40: Limited evidence of a carcinogenic effect.
R43: May cause sensitization by skin contact.
R50: Very toxic to aquatic organisms.

S-phrase(s):

S2: Keep out of reach of children.
S36/37: Wear suitable protective clothing and gloves.
S46: If swallowed, seek medical advice immediately and show this container or label.
S53: Avoid exposure – obtain special instructions before use.
S60: This material and its container must be disposed of as hazardous waste.
S61: Avoid release to the environment. Refer to special instructions/safety data sheets.

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)
Folpet	500 g/L	133-07-3	205-088-6	Eye Irrit. Cat. 2 (H319) Skin Sens. Cat. 1 (H317) Acute Tox. Cat. 4 (H332) Carc. Cat. 2 (H351) Aquatic Acute Cat. 1 (H400)
Denatonium benzoate in Monoethylene glycol	4%		906-307-4	Acute Tox. Cat. 4 (H302)
Morwet EFW	7%	105864-15-1	600-693-5	Skin Irrit. Cat. 2 (H315) Eye Irrit. Cat. 2 (H319)
Formaldehyde	0.3%	50-00-0	200-001-8	Acute Tox. Cat. 3 (H301) Acute Tox. Cat. 3 (H311) Skin Corr. Cat. 1B (H314) Skin Sens. Cat. 1 (H317) Acute Tox. Cat. 3 (H331) Muta. Cat. 2 (H341) Carc. Cat. 1B (H350)

4) FIRST AID MEASURES:

Description of First-Aid Measures:


Inhalation:

Remove patient to fresh air. Lie down and keep warm and rested. Seek medical assistance should breathing become

<p>Skin contact:</p> <p>Eye contact:</p> <p>Ingestion:</p> <p>Most important symptoms and effects, both acute and delayed:</p> <p>Indication of any immediate medical attention and special treatment needed:</p>	<p>difficult. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation.</p> <p>Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. Do not rub skin. Seek medical assistance should irritation persist.</p> <p>Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance.</p> <p>Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. Prevent aspiration if vomiting occurs. For advice, contact the National Poisons Centre. Seek medical assistance.</p> <p>None known.</p> <p>No specific antidote. Treat symptomatically. Perform gastric lavage if ingested and or administer activated charcoal.</p>
<p>5) FIRE-FIGHTING MEASURES:</p>	
<p>Extinguishing Media:</p> <p>Unsuitable Extinguishing Media:</p> <p>Specific Hazards arising from the substance/mixture:</p> <p>Fire Fighting:</p> <p>Protective clothing:</p>	<p>Water fog, Carbon dioxide or dry chemical, halon or alcohol-resistant foam.</p> <p>Do not use high volume water jet, due to contamination risk.</p> <p>Fire may produce irritating or poisonous vapours (toxic oxides of nitrogen and corrosive bromine), mists or other products of combustion</p> <p>Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Dyke fire control water for later disposal. Do not scatter the material. Avoid pollution of waterways.</p> <p>Full protective clothing and self-contained breathing apparatus</p>
<p>6) ACCIDENTAL RELEASE MEASURES:</p>	
<p>Personal precautions, protective equipment and emergency procedures:</p> <p>Environmental precautions:</p> <p>Methods and material for containment and cleaning up:</p>	<p>Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8.</p> <p>Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Do not allow to enter drains or watercourses. If contamination of water courses is unavoidable, report to the Police and the Department of Water/Environmental Affairs immediately.</p> <p>Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Do not allow to enter drains or watercourses. If contamination of water courses is unavoidable, report to the Police and the Department of Water/Environmental Affairs immediately. Wear protective clothing. Clear area of unprotected personnel and ventilate the area. Sweep up solids without generating dust and spreading. Contain and absorb liquid spills with inert material and place in waste containers. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill. Wash area with water and detergent and absorb with further inert material. Do not get water inside containers. Dispose of waste safely in an approved</p>

	landfill. Open burning or dumping of this material is prohibited.								
7) HANDLING & STORAGE:									
Precautions for Safe Handling: Conditions for Safe Storage, including any incompatibilities:	<p>Avoid skin and eye contact and inhalation of spray mist or fumes. Ensure adequate ventilation. Do not handle near sources of ignition. Do not directly apply to areas where surface water is present. Cleaning water should be disposed of in appropriate manner.</p> <p>Store in original container tightly closed and in a locked, dry, cool, ventilated area away from foodstuffs, fertilisers and seeds and sources of ignition. Protect from extreme temperatures. Keep out of reach of children.</p>								
8) EXPOSURE CONTROL / PERSONAL PROTECTION:									
Appropriate Engineering Controls: Control Parameters: Occupational exposure limits:	<p>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.</p> <table border="1"> <thead> <tr> <th>Ingredient</th> <th>CAS#</th> <th>Limit</th> <th>Basis</th> </tr> </thead> <tbody> <tr> <td>Formaldehyde gas</td> <td>50-00-0</td> <td>STEL: 0.3 ppm</td> <td>ACGIH (TLV) [United States]</td> </tr> </tbody> </table>	Ingredient	CAS#	Limit	Basis	Formaldehyde gas	50-00-0	STEL: 0.3 ppm	ACGIH (TLV) [United States]
Ingredient	CAS#	Limit	Basis						
Formaldehyde gas	50-00-0	STEL: 0.3 ppm	ACGIH (TLV) [United States]						
<u>PERSONAL PROTECTIVE EQUIPMENT:</u> Clothing: Respiratory protection: Gloves: Eye protection: Emergency eye wash:	<p>Employee must wear appropriate protective (impervious) clothing to prevent skin contact with this substance.</p> <p>Employee must wear full-face respirator.</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>								
9) PHYSICAL & CHEMICAL PROPERTIES:									
Appearance:	Cream liquid								
Odour:	Characteristic odour								
Solubility:	Suspends in water								
pH:	7,7								
Odour threshold:	Not available								
Melting point / Freezing point	Not available								
Initial boiling point and boiling range	Not available								
Flash point:	Does not flash								
Evaporation rate:	Not available								
Flammability (solid, gas)	Not available								
Upper/ lower flammability or explosive limits:	Not explosive								
Vapour pressure:	Not available								
Vapour density:	Not available								
Relative density:	1.22								
Partition coefficient: n-octanol/water	Not available								
Auto-ignition temperature:	Not available								
Decomposition Temperature:	Not available								
Viscosity:	Not available								
10) STABILITY & REACTIVITY:									

Reactivity:	Stable under normal conditions.
Chemical Stability:	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.
Possibility of hazardous reactions:	No hazardous reactions when stored and handled according to prescribed instructions.
Conditions to avoid:	Avoid excessive heat, open flames and sparks.
Incompatible materials:	Only store in the original container.
Hazardous decomposition product(s):	Fire may produce harmful combustion products, such as carbon monoxide and organic components, which are toxic and irritating.
11) TOXICOLOGICAL INFORMATION:	
Acute Toxicity:	
Oral:	LD50 >9000 mg/kg, rat.
Dermal:	LD50 >4500 mg/kg, albino rabbit.
Inhalation:	LC50 (4h) >1.70 mg/l, rat.
Skin Corrosion/Irritation:	Can cause irritation, rabbit.
Serious Eye Damage/Irritation:	Slight irritation, rabbit.
Respiratory or Skin Sensitization:	Causes sensitization by skin contact, guinea pig.
Germ Cell Mutagenicity:	Not applicable.
Carcinogenicity:	May cause cancer.
Reproductive Toxicity:	No data available.
STOT-SE:	No data available.
STOT-RE:	No data available.
Aspiration Hazard:	No data available.
12) ECOLOGICAL INFORMATION:	
Ecotoxicity:	
Birds:	Oral LD ₅₀ Mallard ducks: > 2000 mg/kg.
Fish:	Toxic to fish in lab tests but hydrolytic instability result in low toxicity.
Daphnia:	EC ₅₀ >1.46 mg/l.
Algae:	E ₅₀ C ₅₀ and E _r C ₅₀ >10 mg/l.
Worms:	No data available.
Bees:	Non-toxic to bees; LD ₅₀ Oral >230 µg/bee; Contact >200 µg/bee.
Persistence and Degradability:	Readily biodegradable. Water DT ₅₀ <0.7h.
Bio-accumulative Potential:	No data available
Mobility in Soil:	Strongly adsorbs to soil, K _{oc} 304–1164 (calc.) thus unlikely to leach.
13) DISPOSAL CONSIDERATIONS:	
Waste Disposal:	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 on site or at an approved waste disposal facility.
Container Disposal:	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. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Destroy it by perforation and flattening and bury in an approved dumpsite.
14) TRANSPORTATION INFORMATION:	
Road Transport ADR / IRD:	UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Liquid, N.O.S. (Folpet) Transport Hazard Class: 9 Miscellaneous Dangerous Goods Packaging group: III Labelling no: 9 Environmental Hazards: Not applicable

	Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.
Maritime Transport IMDG / IMO:	<p>UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Liquid, N.O.S. (Folpet) Transport Hazard Class: 9 Miscellaneous Dangerous Goods Packaging group: III Labelling no: 9 Environmental Hazards: Marine Pollutant Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.</p> 
Air Transport ICAO / IATA:	<p>UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Liquid, N.O.S. (Folpet) Transport Hazard Class: 9 Miscellaneous Dangerous Goods Packaging group: III Labelling no: 9 Environmental Hazards: Not applicable Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.</p>
Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code):	No transport in bulk according to the IBC Code.
15) REGULATORY INFORMATION:	
Safety, health and environmental regulations/legislation specific for the substance/mixture:	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)
Chemical Safety Assessment:	Advice on product handling can be found in sections 7 and 8 of this safety data sheet.
16) OTHER INFORMATION:	

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.

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.

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.

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.

Date of issue: 03/04/2013

Date of revision: 15/03/2018

Abbreviations and acronyms:

1. CAS number: Chemical Abstracts Service number.
2. CLP: Classification, Labelling, Packaging.
3. LD₅₀: Lethal Dose for 50% of the test population.
4. LC₅₀: Lethal Concentration for 50% of the test population.
5. DT₅₀: Half-life.
6. GHS: Globally Harmonised System (of Classification and Labelling of Chemicals).
7. STEL: Short-term exposure limit.
8. ACGIH: American Conference of Governmental Industrial Hygienists.
9. TLV: Threshold limit value.

Literature References:

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