



# SAFETY DATA SHEET

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

## Merpan 50 SC

Revision date 15-Mar-2023

Version 2 Supersedes Date: 18-Jul-2019

Product Code(s)

FNG56904-27

Print Date 15-Mar-2023

MCW 2067 7797060

## 1. Identification

### Product identifier

## Merpan 50 SC

### Other means of identification

Synonyms	Captan 500 SC
Formulation type	SC
Registration Number(s)	L5511
Pure substance/mixture	Mixture

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

Recommended use	Fungicide; Professional use
Uses advised against	No information available

### Detailed information about the manufacturer, supplier, and/or importer

#### Supplier

ADAMA SOUTH AFRICA (PTY) LTD  
Ground Floor, Simeka House  
The Vineyards Office Estate  
99 Jip de Jager Drive  
Bellville 7530

### Emergency telephone number

Emergency Telephone	+27 82 446 8946 (Griffon Poison Centre) +27 86 155 5777 (Tygerberg Poison Information Centre) +27 86 100 6366 and +27 83 253 6618 (SPILL TECH)
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E-mail address	SDS@ADAMA.COM
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## 2. Hazard(s) identification

### Classification of the substance or mixture

Skin sensitization	Category 1 - (H317)
Carcinogenicity	Category 2 - (H351)
Acute aquatic toxicity	Category 1 - (H400)

### Label elements

Signal word

Warning

Hazard pictograms



Hazard statements

H317 - May cause an allergic skin reaction  
 H351 - Suspected of causing cancer  
 H400 - Very toxic to aquatic life

Precautionary statements

P101 - If medical advice is needed, have product container or label at hand  
 P102 - Keep out of reach of children  
 P203 - Obtain, read and follow all safety instructions before use  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 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/face protection  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P318 - If exposed or concerned get medical advice.  
 P333+317 - If skin irritation or rash occurs get medical help  
 P321 - Specific treatment (see supplemental first aid instructions on this label)  
 P362+364 - Take off contaminated clothing and wash it before reuse  
 P391 - Collect spillage  
 P405 - Store locked up  
 P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product is classified as hazardous according to the criteria in South Africa - GHS classification and labelling of chemicals – SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.

**Other hazards**

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

### 3. Composition/information on ingredients

**Substance**

Not applicable

**Mixture****Synonyms**

Captan 500 SC

Chemical name	CAS No	Weight-%	EC No	INTERNATIONAL GHS CLASSIFICATION	M-Factor
Captan	133-06-2	38 - 42	205-087-0	Acute Tox. 3 (H331) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Carc. 2 (H351) Aquatic Acute 1 (H400)	M=10

methenamine	100-97-0	< 0.5	202-905-8	Flam. Sol. 2 (H228) Skin Sens. 1 (H317)	
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**Full text of H- and EUH-phrases: see section 16**

#### **Additional information**

Note: The other ingredients do not cause or contribute towards the correct GHS classification of Merpan 50 SC and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021, Regulation 14(b), not listed in the table above.

## **4. First-aid measures**

### Description of necessary 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 physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.
<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. Keep eye wide open while rinsing. If symptoms persist, call a physician.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.

### For emergency responders

**Self-protection of the first aider** Use personal protective equipment as required.

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

**Symptoms** None known.

### Indication of immediate medical attention and special treatment needed, if necessary

**Note to physicians** Treat symptomatically.

## **5. Fire-fighting measures**

### Suitable 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.

### Specific hazards arising from the chemical

**Specific hazards arising from the chemical** Product is or contains a sensitizer. May cause sensitization by skin contact.

### Specific/special fire-fighting measures

**Specific/special fire-fighting measures** No information available.

**Special protective equipment and precautions for fire-fighters**

**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** 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.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

**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** Pick up and transfer to properly labeled containers.

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

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

**7. Handling and storage****Preventive measures 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 before reuse.

**Precautions for safe handling**

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

**Conditions for safe storage, including any incompatibilities**

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

**8. Exposure controls/personal protection****Control parameters****Exposure guidelines**

Chemical name	ACGIH TLV
Captan 133-06-2	TWA: 5 mg/m <sup>3</sup> inhalable particulate matter

**Appropriate engineering controls**

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

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

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection** Wear suitable gloves.

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear suitable protective clothing.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

**Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Appearance</b>			
<b>Physical state</b>	: Liquid		
<b>Color</b>	: white opaque		
<b>Odor</b>	: characteristic Odor		
<b>Odor threshold</b>	: No data available		
<b>pH</b>	: 6 - 7	CIPAC MT 75.3	solution (1%)
<b>Melting point / freezing point °C</b>	: ----		
<b>Boiling point / boiling range °C</b>	: ----		No data available
<b>Flash point °C</b>	: > 120	EEC A.9	aqueous solution
<b>Evaporation rate</b>	: No data available		
<b>Flammability (solid, gas)</b>	: Not applicable		
<b>Upper/lower flammability or explosive limits</b>	: No data available		
<b>Vapor pressure kPa</b>	: ----		Not applicable
<b>Vapor density</b>	: No data available		
<b>Relative density</b>	: 1.2 - 1.3	EEC A. 3	
<b>Solubility(ies) mg/l</b>	: ----		Not applicable
<b>Partition coefficient Log Pow</b>	:		See Section 12 for additional Ecological Information
<b>Autoignition temperature °C</b>	: > 603	EEC A.15	
<b>Decomposition temperature °C</b>	: No data available		
<b>Kinematic viscosity mm<sup>2</sup>/s 40 °C</b>	: 145	OECD 114	
<b>Explosive properties</b>	: Not an explosive		
<b>Oxidizing properties</b>	: Not oxidizing		
<b>Surface tension</b>	: No data available		
<b>Particle Size</b>	: Not applicable		
<b>Other information</b>			
<b>Bulk density g/ml</b>	: Not applicable		

**10. Stability and reactivity**

**Reactivity**

**Reactivity** No information available.

**Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid**

**Conditions to avoid** None known based on information supplied.

**Incompatible materials**

**Incompatible materials** None known based on information supplied.

**Hazardous decomposition products**

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

**11. Toxicological information****Information on toxicological effects****Acute toxicity**

	<b><u>Values</u></b>	<b><u>Species</u></b>	<b><u>Method</u></b>	<b><u>Remarks</u></b>
<b>Oral LD50 mg/kg</b>	: > 5000	Rat	OPPTS 870.1100	
<b>Dermal LD50 mg/kg</b>	: > 4000	Rat	OECD 402	
<b>Inhalation LC50 LC50</b>	: > 2.03	Rat	OPPTS 870.1300	Maximum attainable concentration
<b>Skin corrosion/irritation</b>	: Non-irritating to the skin	Rabbit	OPPTS 870.2500	
<b>Serious eye damage/eye irritation</b>	: Not irritating to eyes	Rabbit	OPPTS 870.2400	
<b>Sensitization</b>	: Skin sensitizer	Guinea pig	OECD 406	

**Chronic toxicity****Germ cell mutagenicity****Chemical name**

Captan : Not classified

**Carcinogenicity****Chemical name**

Captan : H351 - Suspected of causing cancer

**Reproductive toxicity****Chemical name**

Captan : Not toxic for the reproductive system

**STOT - Single Exposure****Chemical name**

Captan : Not classified

**STOT - Repeated Exposure****Chemical name**

Captan : Not classified

**Aspiration hazard****Chemical name**

Captan : Not classified

**12. Ecological information****Ecotoxicity****Aquatic toxicity****Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	: No data available			
Crustacea 48-hour EC50 mg/l	: No data available			
Algae 72-hour EC50 mg/l	: No data available			
Other plants EC50 mg/l	: No data available			

**Chronic aquatic toxicity**

	<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**

Captan : &gt;2000 Mallard duck

**Bees Oral LD50 µg/bee****Chemical name**

Captan : &gt;100

**Abiotic Degradation****Water DT50 days****Chemical name**

Captan : &lt;1 251 °C

**Soil DT50 days****Chemical name**

Captan : 0.5 - 5.7 aerobic 251 °C

**Biodegradation****Chemical name**

Captan : Not readily biodegradable OECD 301 B

**Log Pow****Chemical name**

Captan : 2.57 pH 7; 25 °C

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

Captan : 113 - 250

**Adsorption/Desorption**

<u>Values</u>	<u>Method</u>	<u>Remarks</u>
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Chemical name  
 Captan : 29 - 198 KOC

### 13. Disposal considerations

#### Disposal 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.

### 14. Transport information

#### ADR

14.1 UN number UN3082  
 14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Captan)  
 14.3 Transport hazard class(es) 9  
 Labels 9  
 14.4 Packing group III  
 Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Captan), 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. (Captan)  
 14.3 Transport hazard class(es) 9  
 Labels 9  
 14.4 Packing group III  
 Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Captan), 9, III  
 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. (Captan)  
 14.3 Hazard Class 9  
 14.4 Packing group III  
 Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Captan), 9, III, Marine pollutant  
 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  
 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code No information available



**IATA**

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

## 15. Regulatory information

### Safety, health and environmental regulations specific for the product in question

Registration Requirements: Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947). Pesticide Handling, Storage and Disposal Safety: SANS10206: 2020. Safety Data Sheet and Occupational Exposure Limit Requirements: Regulations for Hazardous Chemical Agents – 2021 – SA Occupational Health and Safety Act. SANS11014:2010. Control of and handling of poisonous/hazardous and non-poisonous/non-hazardous substances/chemicals in workplaces: Hazardous Substances Act, 1973 (Act No.15 of 1973). Occupational Health and Safety Act No. 85 of 1993.

## 16. Other information

### **Full text of H-Statements referred to under section 3**

H228 - Flammable solid  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H331 - Toxic if inhaled  
H351 - Suspected of causing cancer  
H400 - Very toxic to aquatic life

**Date of preparation of the SDS** No data available

**Revision date** 15-Mar-2023

**Revision Note** Changes made to the last version are labeled with this sign \*\*\*.

### Key or legend to abbreviations and acronyms used in the safety data sheet

IMDG	International Maritime Dangerous Goods (IMDG)
IATA	International Air Transport Association (IATA)
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road

**Legend** Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA Ceiling A3	TWA (time-weighted average) Maximum limit value A3 - Animal Carcinogen	STEL *	STEL (Short Term Exposure Limit) Skin designation
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**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

**The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)****Classification of the mixture**

H317 - May cause an allergic skin reaction  
H351 - Suspected of causing cancer  
H400 - Very toxic to aquatic life

**Classification procedure**

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

**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**