



FarmAg Captan 500 FS (captab 500 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010
Issue date: 9/8/2022 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form	: Mixture
Trade name	: FarmAg Captan 500 FS (captab 500 g/l)
Type of product	: Fungicide
CAS-No.	: 133-06-2
Product group	: End product

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	: A flowable fungicide seeddressing for the control of seedborne diseases of crops as indicated.
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1.3. Supplier's details

Supplier

Farm-Ag International (Pty) Ltd
Old Mill Industrial Park
61, Marshall Drive
P.O. Box 1523
4300 Mount Edgecombe – Durban KwaZulu Natal
South Africa
T 031 003 3486

1.4. Emergency telephone number

Emergency number	: 24 Hr Emergency Number: In case of Poisoning: Poison Information Helpline : 0861 555 777 In case of Spillage: HAZMAT:0800 147 112
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Acute toxicity (dermal), Category 5	H313
Acute toxicity (inhalation:vapour) Category 3	H331
Skin corrosion/irritation, Category 3	H316
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Full text of H-statements: see section 16	

2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA)



Signal word (GHS-ZA)	: Danger
Hazardous ingredients	: Captab 97% TC, Alkylated naphthalene sulfonate sodium salt, Monoethylene glycol
Hazard statements (GHS ZA)	: H313 - May be harmful in contact with skin H316 - Causes mild skin irritation

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Precautionary statements (GHS ZA)	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.
	: P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P103 - Read label before use. P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P261 - Avoid breathing vapours, spray. 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/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. P308+P313 - IF exposed or concerned: Get medical advice/attention. P310 - Immediately call a POISON CENTER or doctor. P312 - Call a POISON CENTER or doctor if you feel unwell. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P391 - Collect spillage. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P501 - Dispose of container to an approved waste disposal plant.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects	: Suspected of causing cancer,Causes damage to organs,Fatal if inhaled,Harmful in contact with skin,Causes mild skin irritation,May cause an allergic skin reaction,Causes serious eye damage,Very toxic to aquatic life.
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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Captab 97% TC	CAS-No.: 133-06-2	≥ 40 – < 45	Acute Tox. 5 (Oral), H303 Acute Tox. 5 (Dermal), H313 Acute Tox. 3 (Inhalation:dust,mist), H331 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351 Aquatic Acute 1, H400 (M=10)
Monoethylene glycol	CAS-No.: 107-21-1	≥ 1 – < 5	Flam. Liq. Not classified Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 Acute Tox. 3 (Inhalation:vapour), H331 Aquatic Acute Not classified
Polyethylene glycol 2,4,6 tristerylphenyl ether	CAS-No.: 105362-40-1	≥ 1 – < 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319

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Name	Product identifier	%	Classification according to the United Nations GHS
Alkylated naphthalene sulfonate sodium salt	CAS-No.: 68425-94-5	≥ 1 – < 5	Skin Irrit. 2, H315 Eye Dam. 1, H318

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a physician immediately. Call a doctor.
First-aid measures after skin contact	: Remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Seek medical advice if necessary. Persons who become sensitized may require specialized medical management with anti-inflammatory agents.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Wash out mouth thoroughly with clean water. In case of ingestion of significant quantities of the fungicide, medical advice should be sought immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Reactions are not likely to occur unless the absorbed dose is extraordinary. Symptoms of repeated exposure to the product may cause contact dermatitis. When product comes in contact with eyes the effect is redness of and tears.
Symptoms/effects after inhalation	: Toxic if inhaled.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.

4.3. Indication of any immediate medical attention and special treatment needed

Advice to physician:

No specific antidotes are available against Captan FS poisoning. If a large amount of Captan FS has been ingested in the last few hours, and if copious vomiting has not already occurred, the stomach must be emptied and steps taken to limit gastrointestinal absorption. If the patient is fully alert and nervous system depression is not anticipated, it is recommended to empty the stomach. When vomiting stops after induced emesis, give activated charcoal and cathartic orally by adding sorbitol to the charcoal slurry.

Dosage of Activated Charcoal:

Adults and children over 12 years: 50 to 100 mg in 300 to 800 ml water. Children under 12 years: 15 to 30 mg in 100 to 300 ml water.

Dosage of Sorbitol:

Adults and children over 12 years: 1 to 2 mg/kg body weight to a maximum of 150 mg per dose.

Children under 12 years: 1.0 to 1.5 mg/kg body weight to a maximum of 50 mg per dose.

If sorbitol is given separately, it should be diluted with an equal volume of water before administration.

If there are any indications of central nervous system depression, or if the patient fails to vomit within 30 minutes of Syrup of Ipecac administration, measures should be taken to protect the respiratory tract from aspiration of gastric contents, then the stomach should be emptied by gastric intubation, aspiration and lavage with a slurry of activated charcoal. Install activated charcoal following lavage. Unless diarrhoea has already commenced, include a cathartic to hasten elimination.

CAUTION: Do not instill fluid so rapidly that overloading of the stomach leads to vomiting or regurgitation, followed by aspiration. Serious electrolyte disturbances may follow catharsis, especially in young children. If contact with the toxicant has been minimal, administration of charcoal without the cathartic, followed by careful observation of the patient, probably represent optimal management.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Water spray as a fog can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Do not use direct jet of water. Contain water used for fire-fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

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5.2. Special hazards arising from the substance or mixture

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| Fire hazard | : Slight fire hazard when exposed to heat or flame. |
| Explosion hazard | : Not highly flammable and not explosive. |
| Hazardous decomposition products in case of fire | : Product releases CSCl_2 , HCl , SO_x , NO_x , CO and CO_2 when exposed to very high temperatures. |

5.3. Advice for firefighters

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| Firefighting instructions | : Fight fire from maximum distance. Remove container/bag from fire area if possible. Contain fire control agents for later disposal. Use a recommended extinguishing agent for the type of surrounding fire. Water can be used to cool unaffected containers/bags. Avoid inhaling hazardous vapours. Keep upwind. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
| Personal protection (Emergency response) | : Wear respiratory protection, Wear protective gloves, Wear protective clothing, Wear eye protection, Face-shield |



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

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| Emergency procedures | : Do not breathe vapours, spray. Only qualified personnel equipped with suitable protective equipment may intervene. |
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6.1.2. For emergency responders

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| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
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6.2. Environmental precautions

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

6.3. Methods and material for containment and cleaning up

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| For containment | : Collect spillage. |
| Methods for cleaning up | : For small dry spills, sweep up with damp earth or sand or other suitable absorbent, taking care not to raise a dust cloud. Place the material into a clean, dry container and cover for subsequent disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Keep unnecessary people away. |
| Other information | : Dispose of materials or solid residues at an authorized site. |

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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| Precautions for safe handling | : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe vapours, spray. Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing. |
| Hygiene measures | : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Storage area	: Keep only in the original container. Store in a dark area. Store out of reach of unauthorised persons, children and animals.
Information on mixed storage	: KEEP SUBSTANCE AWAY FROM: Food supplies. Water supplies.
Maximum storage period	: 2 years
Storage temperature	: 0 – 50 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Captab 97% TC (133-06-2)

South Africa - Occupational Exposure Limits (Recommended Limits)

Local name	Captan
OEL TWA	10 mg/m ³ (I: inhalable fraction)
Remark	DSEN (dermal sensitisation, potential to produce dermal sensitisation), SKIN (danger of cutaneous absorption)
Regulatory reference	Government Notice No. R. 280, 2021

South Africa - Occupational Exposure Limits (Airborne Pollutants)

Local name	Captan
OEL TWA	5 mg/m ³
OEL STEL	15 mg/m ³
Regulatory reference	Government Notice No. R 904

Monoethylene glycol (107-21-1)

South Africa - Occupational Exposure Limits (Recommended Limits)

Local name	Ethylene glycol
OEL TWA	50 mg/m ³ (V: vapour fraction) 100 mg/m ³ (V: vapour fraction)
OEL STEL	20 mg/m ³ (H: aerosol only)
Remark	SKIN (danger of cutaneous absorption)
Regulatory reference	Government Notice No. R. 280, 2021

South Africa - Occupational Exposure Limits (Airborne Pollutants)

Local name	Ethylene glycol (Ethane-1,2-diol; 1,2-Dihydroxyethane)
OEL TWA	20 mg/m ³
OEL STEL	40 mg/m ³
Regulatory reference	Government Notice No. R 904

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection	: Protective gloves
Eye protection	: Safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: In case of inadequate ventilation wear respiratory protection.

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Personal protective equipment symbol(s):



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Viscous liquid suspension.
Colour	: Pink to pinkish-white.
Odour	: Faint odour.
Odour threshold	: No data available
pH	: 6.1
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: 158 – 164 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Relative density of saturated gas/air mixture	: No data available
Density	: No data available
Relative gas density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: No data available
Explosive limits	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

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10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : May be harmful in contact with skin.
Acute toxicity (inhalation) : Toxic if inhaled.

FarmAg Captan 500 FS (captab 500 g/l) (133-06-2)

ATE ZA (Dermal)	2549.476 mg/kg bodyweight
ATE ZA (vapours)	4.081 mg/l/4h
Unknown acute toxicity (GHS ZA)Unknown acute toxicity (GHS ZA)	3.93% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 56.2% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 96.79% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

Captab 97% TC (133-06-2)

LD50 oral rat	> 5000 mg/kg bodyweight
LD50 oral	2110 mg/kg Mice
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg bodyweight (EPA OPP 81-2, 3 day(s), Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat (Dust/Mist)	0.67 mg/l/4h

carboxymethylcellulose, sodium salt (9004-32-4)

LD50 oral rat	27000 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Literature study, Dermal)
LC50 Inhalation - Rat	> 5.8 mg/l (4 h, Rat, Literature study, Inhalation)

Monoethylene glycol (107-21-1)

LD50 oral rat	7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))
LD50 dermal	> 3500 mg/kg bodyweight (Mouse, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

poly(dimethylsiloxane) (9016-00-6)

LD50 oral rat	> 5000 mg/kg (Rat, Literature study, Oral)
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1,2-Benzisothiazolin-3-one (2634-33-5)

LD50 oral rat	490 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
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1,2-Benzisothiazolin-3-one (2634-33-5)

LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
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Xanthan gum (11138-66-2)

LD50 oral rat	45000 mg/kg
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Rhodamine B Extra (81-88-9)

LD50 oral rat	500 mg/kg (Rat, Oral)
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Water (7732-18-5)

LD50 oral rat	90000 mg/kg
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Skin corrosion/irritation	: Causes mild skin irritation. pH: 6.1
Serious eye damage/irritation	: Causes serious eye damage. pH: 6.1
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

1,2-Benzisothiazolin-3-one (2634-33-5)

STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Very toxic to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Captab 97% TC (133-06-2)

LC50 - Fish [1]	0.072 mg/l Bluegill sunfish
LC50 - Fish [2]	0.0186 mg/l Rainbow trout
LC50 - Other aquatic organisms [1]	7 – 10 mg/l Daphnia
EC50 - Crustacea [1]	> 7.1 mg/l (ASTM, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Lethal)
ErC50 algae	0.66 mg/l Pseudokirchneriella subcapitata
BCF - Fish [1]	140 (Other, 29 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	2.57 (Experimental value, 25 °C)
Additional ecotoxicological information	Birds: Acute oral LD50 for mallard ducks and bobwhite quail >2000 mg/kg. Dietary LC50 for mallard ducks and bobwhite quail >5200 mg/kg diet. Bees (LD50, µg/bee) >200 (contact); >100 (oral). Worms: LC50 (14d) for earthworms >260 mg/kg soil.

carboxymethylcellulose, sodium salt (9004-32-4)

LC50 - Fish [1]	> 21000 ppm (96 h, Salmo sp., Fresh water, Literature study)
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Monoethylene glycol (107-21-1)

LC50 - Fish [1]	> 72860 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, Daphnia magna, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)

poly(dimethylsiloxane) (9016-00-6)

LC50 - Fish [1]	> 10000 mg/l (96 h, Salmo gairdneri, Static system, Literature study)
BCF - Fish [1]	2.9 – 1250 (3 day(s), Hypophthalmichthys molitrix, Literature study)

1,2-Benzisothiazolin-3-one (2634-33-5)

LC50 - Fish [1]	2.18 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	2.94 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value, Lethal)
ErC50 algae	150 µg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Experimental value, GLP)
BCF - Fish [1]	6.62 (Equivalent or similar to OECD 305, 56 day(s), Lepomis macrochirus, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 0.99 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)

Xanthan gum (11138-66-2)

LC50 - Fish [1]	420 mg/l Source: ECOTOX
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Rhodamine B Extra (81-88-9)

LC50 - Fish [1]	217 mg/l (96 h, Salmo gairdneri)
EC50 - Crustacea [1]	22.9 mg/l (48 h, Daphnia magna)
BCF - Fish [1]	< 1.7 (Cyprinus carpio, Test duration: 6 weeks)
Partition coefficient n-octanol/water (Log Pow)	1.95 (Experimental value)

Water (7732-18-5)

Partition coefficient n-octanol/water (Log Pow)	-1.38
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12.2. Persistence and degradability

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Persistence and degradability	No additional information available
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Captab 97% TC (133-06-2)

Persistence and degradability	Not readily biodegradable in water.
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carboxymethylcellulose, sodium salt (9004-32-4)

Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.05 – 0.1 g O ₂ /g substance
Chemical oxygen demand (COD)	0.9 g O ₂ /g substance

Monoethylene glycol (107-21-1)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
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Monoethylene glycol (107-21-1)

Biochemical oxygen demand (BOD)	0.47 g O ₂ /g substance
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance
ThOD	1.29 g O ₂ /g substance

poly(dimethylsiloxane) (9016-00-6)

Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.
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1,2-Benzisothiazolin-3-one (2634-33-5)

Persistence and degradability	Not readily biodegradable in water.
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Rhodamine B Extra (81-88-9)

Persistence and degradability	Not readily biodegradable in water.
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12.3. Bioaccumulative potential

FarmAg Captan 500 FS (captab 500 g/l) (133-06-2)

Bioaccumulative potential	No additional information available
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Captab 97% TC (133-06-2)

BCF - Fish [1]	140 (Other, 29 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	2.57 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

carboxymethylcellulose, sodium salt (9004-32-4)

Bioaccumulative potential	Not bioaccumulative.
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Monoethylene glycol (107-21-1)

Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.

poly(dimethylsiloxane) (9016-00-6)

BCF - Fish [1]	2.9 – 1250 (3 day(s), Hypophthalmichthys molitrix, Literature study)
Bioaccumulative potential	No straightforward conclusion can be drawn based upon the available numerical values.

1,2-Benzisothiazolin-3-one (2634-33-5)

BCF - Fish [1]	6.62 (Equivalent or similar to OECD 305, 56 day(s), Lepomis macrochirus, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 0.99 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Rhodamine B Extra (81-88-9)

BCF - Fish [1]	< 1.7 (Cyprinus carpio, Test duration: 6 weeks)
Partition coefficient n-octanol/water (Log Pow)	1.95 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Water (7732-18-5)

Partition coefficient n-octanol/water (Log Pow)	-1.38
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12.4. Mobility in soil

FarmAg Captan 500 FS (captab 500 g/l) (133-06-2)

Mobility in soil	No additional information available
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Captab 97% TC (133-06-2)

Surface tension	72.4 mN/m (20 °C)
Partition coefficient n-octanol/water (Log Pow)	2.57 (Experimental value, 25 °C)
Ecology - soil	No (test)data on mobility of the substance available. Not toxic to plants. Not toxic to bees in normal conditions of use.

carboxymethylcellulose, sodium salt (9004-32-4)

Ecology - soil	No (test)data on mobility of the substance available.
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Monoethylene glycol (107-21-1)

Surface tension	48.4 mN/m (20 °C)
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)
Ecology - soil	Highly mobile in soil.

poly(dimethylsiloxane) (9016-00-6)

Ecology - soil	Adsorbs into the soil. Low potential for mobility in soil. Not toxic to plants.
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1,2-Benzisothiazolin-3-one (2634-33-5)

Surface tension	72.6 mN/m (20 °C, 0.1 %, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 0.99 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Highly mobile in soil.

Rhodamine B Extra (81-88-9)

Partition coefficient n-octanol/water (Log Pow)	1.95 (Experimental value)
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Water (7732-18-5)

Partition coefficient n-octanol/water (Log Pow)	-1.38
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12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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SECTION 14: Transport information



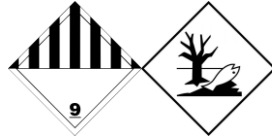
In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
3082	3082	3082

FarmAg Captan 500 FS (captan 500 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

SANS	IMDG	IATA
14.2. Proper Shipping Name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Captan 500 g/l)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Captan 500 g/l)	Environmentally hazardous substance, liquid, n.o.s. (Captan 500 g/l)
14.3. Transport hazard class(es)		
9	9	9
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

14.6. Special precautions for user

SANS

Special provisions (SANS)	: 179, 274, 331, 335
Limited quantities (SANS)	: 5 L
Limited quantities (SANS)	: 5 L
Packagings, large packagings and IBCs Packing instructions (SANS)	: P001, IBC03, LP01
Packagings, large packagings and IBCs Special packing instructions (SANS)	: PP1
Portable tank and bulk containers instructions (SANS)	: T4
Portable tank and bulk container special provisions (SANS)	: TP1, TP29

IMDG

Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	: A

IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197, A215
ERG code (IATA)	: 9L

FarmAg Captan 500 FS (captan 500 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

SECTION 16: Other information

Issue date : 08/09/2022

Full text of H-statements	
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H315	Causes skin irritation.
H316	Causes mild skin irritation
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects.

Safety Data Sheet (SDS), South Africa

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.