Albaugh HALVAR 420 SC Fungicide

Safety Data Sheet

Safety Data Sheet according to NOHSC and ADG requirements

Date of issue: 27/06/2024 : Version: 1

SECTION 1: Identification

1.1. Product identifier

Trade name : Albaugh HALVAR 420 SC Fungicide

1.2. Other means of identification

Prothioconazole, Tebuconazole

1.3. Recommended use of the chemical and restrictions on use

1.3.1. Recommended use

Industrial/Professional use : For professional use only

Use of the substance/mixture : Agriculture Fungicide

1.3.2. Restrictions on use

No additional information available.

1.4. Details of the manufacturer/importer

Albaugh Australia Pty Ltd
Level 1, 530 Little Collins Street, MELBOURNE 3000, Australia
Tel (03) 99097183
ABN: 676 890 994

1.5. Emergency phone number

Emergency number : 1800 862 115 (Australia)
+61 2 9037 2994 Local (City): Syndney

SECTION 2: Hazards identification

2.1. Classification of the hazardous chemical

This material is hazardous according to Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture:

Reproductive toxicity Category 2

The following hazard classes fall outside the scope of the Workplace Health and Safety Regulations :

Hazardous to the aquatic environment (acute) – Category 1

Hazardous to the aquatic environment (chronic) – Category 1

2.2. Label elements, including precautionary statements

Hazard pictograms :

Health Hazard

Environment

Signal word : Warning

Hazard statements : H361 Suspected of damaging fertility or the unborn child <

Precautionary statements : P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with local regulations

SECTION 3: Composition and information on ingredients

Name	Ingredient identifier (CAS No.)	Content
Tebuconazole	107534-96-3	19%
Other components are not considered hazardous in this formulation and therefore are not required to be disclosed according to the WHS Regulations. Following is the information for the active constituent which is not classified as hazardous in this formulation.		
Prothioconazole	178928-70-6	19%
Glycerol	56-81-5	<10%
Other ingredients (non-hazardous)	Not Available	30-60%

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Call a POISON INFORMATION CENTER (Australia) on 13 11 26 or doctor/physician.

First-aid measures after eye contact : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain emergency medical attention.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with plenty of mild soap and water. If symptoms persist, call a physician.

First aid facitilities : Eyewash, safety shower and normal washroom facilities.

4.2. Symptoms caused by exposure

To date no symptoms are known.

4.3. Medical attention and special treatment

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1. Suitable extinguishing equipment

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

In the event of fire the following may be released: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Sulphur oxides, Nitrogen oxides (NOx)

5.3. Special protective equipment and precautions for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering drains or water bodies.

Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth. Do not allow run-off from fire fighting to enter drains or water courses.

Protection during firefighting : In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit. Do not enter fire area without proper protective equipment, including respiratory protection. Breathable air apparatus must be worn when fighting a fire in which this product is involved.

Hazchem code •3Z

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled product or contaminated surfaces. Wear appropriate personal protective equipment and clothing to prevent exposure. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

Protective equipment : Evacuate unnecessary personnel. Equip cleanup crew with proper protection. See Section 8

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

Soak up spills with inert solids, such as clay, sand, soil, vermiculite or diatomaceous earth as soon as possible. Collect spillage in sealable open-top type containers for disposal. If large liquid spills occur, attempt to recover as much spilt material from sumps and bunded areas, as possible, before absorbing remaining material into vermiculite or other absorbent.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Pregnant or breastfeeding women must not handle this product.
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Should be handled in closed systems, if possible. Provide adequate ventilation to prevent formation of vapour. Do not breathe spray. Use only outdoors. Avoid contact with skin and eyes.

Wear appropriate personal protective equipment. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place out of direct sunlight. Store in a locked enclosure. Keep container tightly closed. Do not store with seed, fertilisers or foodstuffs.

Incompatibilities	:	Strong bases. Strong acids. Sources of ignition.

SECTION 8: Exposure controls/personal protection

8.1. Exposure control measures

Exposure standards	The exposure standard for the constituent, glycerin: TWA = 10 mg/m3 (mist) STEL = Not set. As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

8.2. Biological monitoring

No biological limit allocated for the product or any of its ingredients. No biological monitoring is required.

8.3. Control banding

Not available.

8.4. Engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.5. Individual protection measures

Personal protective equipment	:	Avoid all unnecessary exposure. When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles and appropriate respiratory protection. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. After each day's use, wash contaminated clothing and safety equipment.
Eye and face protection	:	Chemical goggles or safety glasses. Eye protection devices should conform to relevant regulations. Consult AS/NZS 2210 and AS/NZS 2919 for further information.
Skin protection	:	Wear protective gloves of impervious material. Occupational protective gloves should conform to relevant regulations. Consult AS/NZS 1336 and AS/NZS 1337 for further information.
Respiratory protection	:	If ventilation is inadequate, suitable respiratory protection should be worn, consult AS/NZS 1715 and AS/NZS 1716 for further information.
Thermal hazards	:	Wear appropriate thermal protective clothing, when necessary.

SECTION 9: Physical and chemical properties

Physical state	:	Liquid
Colour	:	Cream or Off-white
Odour	:	Mild. Characteristic
Odour threshold	:	No data available
pH	:	5 - 7 in 1% aqeous solution at 25°C
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	100 °C (211.9 °F) estimated
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	1.132
Solubility	:	No data available.
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	250 - 450 cP
Explosive properties	:	Not explosive
Oxidising properties	:	Not oxidising
Explosive limits	:	No data available
Particle characteristics		No data available
Partition coefficient: n-octanol/water (log value)		No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases. Keep away from strong oxidising agents.

10.6. Hazardous decomposition products

Thermal decomposition may result in the release of toxic and/or irritating fumes. Hydrogen cyanide (hydrocyanic acid), Carbon monoxide, Nitrogen oxides (NOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

The information presented below is based on the toxicity data for the formulated product, Albaugh Halvar 420 SC Fungicide.

Albaugh Halvar 420 SC Fungicide		
Acute toxicity	:	Oral: >2000 mg/kg Dermal: >5050 mg/kg Inhalation: >2.18 mg/l, 4 hours
Skin corrosion/irritation	:	Not a skin irritant according to available data.
Serious eye damage/irritation	:	Not an eye irritant according to available data.
Respiratory or skin sensitisation	:	Not a skin sensitiser and not expected to be a respiratory sensitiser according to available information.
Germ cell mutagenicity	:	Not suspected to cause genetic defects according to available data.
Carcinogenicity	:	Not considered to be carcinogenic according to available data.
Reproductive toxicity	:	Toxic to reproduction according to available data.
Specific target organ toxicity (single exposure)	:	Not expected to cause toxicity to a specific target organ through single exposure according to available information.
Specific target organ toxicity (repeated exposure)	:	Not expected to cause toxicity to a specific target organ
Aspiration hazard	:	Not expected to be an aspiration hazard according to available information.

The information presented below is based on the toxicity data for the active constituent, Prothioconazole:
https://www.apvma.gov.au/sites/default/files/publication/13941-prs-prothioconazole.pdf

Prothioconazole		
Acute toxicity	:	Oral: >6200 mg/kg bw (rats) Dermal: >2000 mg/kg bw (rats) Inhalation: >4990 mg/m^3 (rats)
Skin corrosion/irritation	:	Not considered a skin irritant according to available information.
Serious eye damage/irritation	:	Not considered an eye irritant according to available information.
Respiratory or skin sensitisation	:	Not a skin sensitiser and not expected to be a respiratory sensitiser according to available information.
Germ cell mutagenicity	:	Not suspected to cause genetic defects according to available information. Prothioconazole was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.
Carcinogenicity	:	Not considered to be carcinogenic according to available information. Prothioconazole was not carcinogenic in lifetime feeding studies in rats and mice.
Reproductive toxicity	:	Not considered to be toxic to reproduction according to available information.
Specific target organ toxicity (single exposure)	:	Not expected to cause toxicity to a specific target organ through single exposure according to available information.
Specific target organ toxicity (repeated exposure)	:	Does not cause damage to organs through prolonged or repeated exposure according to available information. Prothioconazole did not cause specific target organ toxicity in experimental animal studies.
Aspiration hazard	:	Not expected to be an aspiration hazard according to available information.

The information presented below is based on the toxicity data for the active constituent Tebuconazole:
https://echa.europa.eu/documents/10162/b02f4de6-574e-6ba3-7f80-af8ea03df463

Tebuconazole	
Acute toxicity	: Oral: 1700 mg/kg bw (rats) Dermal: >5000 mg/kg bw (rats) Inhalation: >371 mg/m^3 (aerosol), >5093 mg/m^3 (dust),4 hours (rats)
Skin corrosion/irritation	: Not considered a skin irritant according to available information.
Serious eye damage/irritation	: Not considered an eye irritant according to available information.
Respiratory or skin sensitisation	: Not a skin sensitiser and not expected to be a respiratory sensitiser according to available information.
Germ cell mutagenicity	: Not suspected to cause genetic defects according to available information. Tebuconazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Carcinogenicity	: Not considered to be carcinogenic according to available information. Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the liver. The mechanism of tumour formation is not considered to be relevant to man.
Reproductive toxicity	: Considered to be toxic to reproduction according to available information. Tebuconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Tebuconazole is related to parental toxicity. Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations.
Specific target organ toxicity (single exposure)	: Not expected to cause toxicity to a specific target organ through single exposure according to available information.
Specific target organ toxicity (repeated exposure)	: Does not cause damage to organs through prolonged or repeated exposure according to available information. Tebuconazole did not cause specific target organ toxicity in experimental animal studies.
Aspiration hazard	: Not expected to be an aspiration hazard according to available information.

SECTION 12: Ecological information

12.1. Ecotoxicity

Available information on this product indicates that this product is classified as an acute and chronic aquatic toxicant.

Prothioconazole	
LC50 Fishes (96h)	1.83 mg/L (Rainbow trout)
EC50 Crustacea (48h)	1.3 mg/L (*Daphnia*)
EC50 Algae (72h)	2.18 mg/L (*Pseudokirchnerella subcapitata*)

Tebuconazole	
LC50 Fishes (96h)	4.4 mg/L, 5.7 mg/L (Rainbow trout)
EC50 Crustacea (48h)	2 mg/L (*Daphnia*)
EC50 Algae (72h)	3.2 mg/L (*Pseudokirchnerella subcapitata*)

12.2. Persistence and degradability

Prothioconazole	
Persistence and degradability	Not rapidly biodegradable.

Tebuconazole	
Persistence and degradability	Not rapidly biodegradable.

12.3. Bioaccumulative potential

Prothioconazole	
Bioaccumulative potential	Low bioaccumulation potential. Partition coefficient n-octanol / water (log Kow) = 3.82, @ 20°C Bioconcentration factor (BCF) = 19

Tebuconazole	
Bioaccumulative potential	Low bioaccumulation potential. Partition coefficient n-octanol / water (log Kow) = 3.44, @ 20°C Bioconcentration factor (BCF) = 35 - 59

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Other information : No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product. Do not reuse container for any other purpose.

SECTION 14: Transport information

Road and rail transport	:	**Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.** **Refer to the exceptions as per the Australian Special Provisions AU01.**
Additional Information:	:	Australian Special Provisions AU01: Environmentally Hazardous Substances meeting the description of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in; (a) packagings that do not incorporate a receptacle exceeding 500 Kg (L); or (b) IBCs.

Marine transport:	:	**Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; MARINE POLLUTANT**
UN Number	:	3082
Proper Shipping Name or Technical Name:	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (CONTAINS PROTHIOCONAZOLE, TEBUCONAZOLE)
Transport Hazard Class:	:	9
Packaging Group:	:	III
Hazchem Code:	:	•3Z
IMDG EMS Fire:	:	F - A
IMDG EMS Spill:	:	S – F
Environmental Hazards:	:	Yes. Marine Pollutant substance(s): PROTHIOCONAZOLE, TEBUCONAZOLE
Special Precautions for User:	:	Not available.
Additional Information:	:	The marine pollutant mark is not required when transported in sizes of ⩽ 5 L or ⩽ 5 kg.

Air transport:	:	**Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air**
UN Number	:	3082
Proper Shipping Name or Technical Name:	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (CONTAINS PROTHIOCONAZOLE, TEBUCONAZOLE)
Transport Hazard Class:	:	9
Packaging Group:	:	III
Hazchem Code:	:	•3Z
Special Precautions for User:	:	Not available.
Additional Information:	:	IATA Special Provision A197: when transported in sizes of ⩽ 5 L or ⩽ 5 kg per packaging (inner or single) are not subject to the code.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations

APVMA Number : 90170

Poison Schedule : Schedule 5

AICIS : Listing in the AICS is not required for products regulated by the APVMA.

SECTION 16: Other information

Date of issue : 27/06/2024

Version : 1

Reason(s) for issue : First issue

Literature References : See respective sections for information

Abbreviations	:	ADG Code - Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition) AICIS – Australian Industrial Chemicals Introduction Scheme (formerly NICNAS) AIIC - Australian Inventory of Industrial Chemicals APVMA – Agricultural Pesticides and Veterinary Medicines Australia GHS - Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition) 2017 IARC - International Agency for Research on Cancer Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (June 2023) STEL - Short term exposure limit means the average airborne concentration of a substance calculated over a 15 minute period. The STEL should not be exceeded at any time during a normal eight hour working day. SUSMP - Standard for the Uniform Scheduling of Medicines & Poisons SWA - Safe Work Australia, formerly ASCC and NOHSC TGA – Therapeutic Goods Australia TWA - Time-weighted average means the average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week. WHS – Workplace Health and Safety

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