


Section 1: Identification

Product name:	Greenseal Ultra
Other names:	-
Recommended use:	Fungicide for the control of European Canker on pipfruit, silver leaf on pipfruit and summerfruit, Eutypa dieback on grape vines and for the treatment of pruning wounds on grapes, kiwifruit, ornamentals, pipfruit and summerfruit.
Manufacturer/Importer details:	PGG Wrightson Ltd 1 Robin Mann Place Christchurch Airport PO Box 292, Christchurch 8140 Phone: 03 372 0890
24 hour emergency contact:	Phone: 0800 10 22 76
National Poisons Centre:	0800 CHEMCALL (0800 243622) 0800 POISON (0800 764766)

Section 2: Hazard identification

	Product is classified as hazardous according to the Hazardous Substances (Classification) Notice 2020 of the HSNO Act, 1996.
HSNO Approval:	HSR100149
Hazardous classifications:	Skin irritation Category 2, Eye irritation Category 2, Skin sensitisation Category 1, Reproductive toxicity Category 2, Specific target organ toxicity -repeated exposure Category 2, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1, Hazardous to terrestrial vertebrates
Pictograms:	
Signal word:	WARNING
Hazard statements:	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects. Hazardous to terrestrial vertebrates.



Prevention statements:	<p>P103 Read label before use. P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe mist/vapours. P264 Wash hands and face thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective clothing including waterproof gloves, eye protection and overalls P281 Use personal protective equipment as required.</p>
Response statements:	<p>P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or rash occurs: Get medical attention. P362 Take off contaminated clothing and wash before re-use. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical attention. P308+P313 IF exposed or concerned: Get medical advice/attention. P314 Get medical advice/attention if you feel unwell. P391 Collect spillage. P405 Store locked up.</p>
Storage statement:	P501 Dispose of product and containers in accordance with local Regulations. See Section 13 for details.
Disposal statement:	
Additional information:	<p>Do not apply directly into or onto water. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.</p>

Section 3: Composition/information on ingredients

Chemical identity of ingredients with health or environmental hazards:

<i>Ingredient</i>	<i>CAS No.</i>	<i>Proportion % w/w</i>
Tebuconazole	107534-96-3	< 1*
Octhilinone	26530-20-1	< 2**
Propylene glycol	57-55-6	< 15
Ethylene glycol monobutyl ether	111-76-2	< 2
Other ingredients	Proprietary	< 60
Water	7732-18-5	to balance to 100

* equivalent to 10 g/L tebuconazole

**equivalent to 17.5 g/L octhilinone

Section 4: First-aid measures

General advice:	If medical advice is needed, have product container or label at hand. For advice contact National Poisons Centre 0800 POISON [0800 764 766] or a doctor. If exposed or concerned, or feeling unwell, get advice.
Ingestion:	Do NOT induce vomiting. Rinse mouth. Get medical attention. If conscious, give 3-4 glasses of water to dilute stomach contents.

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Inhalation:	Remove person from exposure to fresh air and keep at rest in position comfortable for breathing. Get medical advice if person feels unwell.
Skin contact:	Remove contaminated clothing and wash affected area thoroughly with plenty of soap and water. If skin irritation or rash occurs get medical attention. Wash contaminated clothing before reuse.
Eye contact:	Immediately rinse eyes with running water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists, get medical attention.
First aid facilities:	Emergency showers and eyewashes to be available in the immediate vicinity of any potential exposure.
Advice to doctor:	Treat symptomatically.

Section 5: Fire-fighting measures

Flammability:	Not flammable.
Appropriate extinguishing media:	Water spray, water fog, CO ₂ , foam or dry extinguisher.
Combustion products:	Carbon dioxide and water. In case of incomplete combustion, carbon monoxide, hydrocarbons, aldehydes, ketones and acetic acid may be developed.
Special protective equipment and precautions for fire-fighters:	In case of fire wear full chemical resistant protective clothing and a self-contained breathing apparatus.
HAZCHEM code:	3Z

Section 6: Accidental release measures

Personal precautions:	Wear appropriate protective clothing as described in Section 8.
Environmental precautions:	Contain spillage. Prevent from entering waterways.
Procedure for clean up:	Absorb spills with inert materials and place in appropriate labelled waste containers. Wash area with water and absorb with further inert material. Dispose of waste safely at an approved facility.

Section 7: Handling and storage

Safe handling:	Read label before use. When mixing or applying wear protective clothing such as waterproof gloves, overalls and eye protection. Apply using only non-dispersive application methods. Do not eat, drink or smoke while using. Wash splashes off exposed skin or out of eyes immediately. Wash hands and face thoroughly after use.
Safe storage:	Keep out of reach of children. Store in original container, tightly closed and in a locked, dry, cool, well-ventilated area away from foodstuffs, feeds, seeds, fertilisers, insecticides, or fungicides used for the protection of crops.

Section 8: Exposure controls/personal protection

Occupational exposure limits:	<i>Ingredient</i>	<i>Form of exposure</i>	<i>WES-TWA</i>	<i>WES-STEL</i>
	Propylene glycol	Vapour and particulates Particulates only	474 mg/m ³ (150 ppm) 10 mg/m ³	-



Engineering controls:	In a situation where vapours may be generated proper ventilation must be provided.
Respiratory protection:	Not required if used outdoors and in well-ventilated area.
Hand protection:	Waterproof gloves.
Eye protection:	Safety glasses with side shields or goggles.
Skin protection:	Protective clothing (overalls) and boots.

Section 9: Physical and chemical properties

(a) Appearance:	Green viscous opaque liquid.
(b) Odour:	Slight.
(c) Odour threshold:	No data available.
(d) pH:	No data available.
(e) Melting point/freezing point:	No data available.
(f) Initial boiling point and boiling range:	No data available.
(g) Flash point:	Not flammable.
(h) Flammability (solid, gas):	Not applicable.
(i) Upper/lower flammability or explosive limits:	Not applicable.
(j) Vapour pressure:	No data available.
(k) Vapour density:	No data available.
(l) Relative density:	1.06-1.08g/ml at 20°C
(m) Solubility:	Dispersible in water.
(n) Partition coefficient: n-octanol/water:	No data available.
(o) Auto-ignition temperature:	No data available.
(p) Decomposition temperature:	No data available.
(q) Kinematic viscosity:	1000-15000 cP

Section 10: Stability and reactivity

Stability of the substance:	Stable under normal storage and handling conditions.
Incompatible materials:	Strong oxidising/reducing agents.
Hazardous decomposition products:	Carbon dioxide, carbon monoxide, hydrocarbons, aldehydes, ketones, and acetic acid.

Section 11: Toxicological information

	Toxicity classifications determined by assessment of the components in the formulated mixture.
(i) Acute toxicity:	Not classified as acutely toxic if ingested, in contact with skin or inhaled.
(ii) Aspiration hazard:	Not classified as aspirant hazard



(iii)	Respiratory irritation:	Not classified as respiratory irritant.
(iv)	Skin corrosion/ irritation:	Irritant.
(v)	Serious eye damage/ irritation:	Serious eye irritant.
(vi)	Respiratory or skin sensitisation:	Contact sensitiser.
(vii)	Germ cell mutagenicity:	Not classified.
(viii)	Carcinogenicity:	Not classified.
(ix)	Reproductive toxicity:	Tebuconazole identified as may cause reproductive or development effects.
(x)	Specific organ toxicity:	Tebuconazole identified as may cause adverse effects to target organs or systems through prolonged or repeated exposure.
(xi)	Narcotic effects:	Not classified.
(xii)	Other information.	Not available.

Toxicological information for active ingredients:

Octhilinone -	Oral LD ₅₀ (rat): 550 mg/kg Dermal LD ₅₀ (rabbit): 690 mg/kg
Tebuconazole -	Oral LD ₅₀ (mouse): 1615 mg/kg Oral LD ₅₀ (rat, male): 4000mg/kg Dermal LD ₅₀ (rat): > 5000mg/kg

Section 12: Ecological information

	Ecotoxicological classifications determined by assessment of the components in the formulated mixture.
(a) Aquatic toxicity:	Very toxic in the aquatic environment with long lasting effects.
(b) Soil environment:	Not classified.
(c) Terrestrial vertebrate toxicity:	Harmful to terrestrial vertebrates.
(d) Terrestrial invertebrate toxicity:	Not classified.
(e) Persistence and degradability:	Not expected to rapidly degrade. Tebuconazole - DT ₅₀ (anaerobic): 866 days DT ₅₀ (aerobic): 1386 days
(f) Potential to be bioaccumulative:	No data to indicate bioaccumulation risk.
(g) Mobility in soil:	Product disperses in water.
Ecotoxicological information for active ingredients:	Octhilinone - Rainbow trout LC ₅₀ (96 hour): 0.047mg/l <i>Daphnia magna</i> EC ₅₀ (48 hour): 0.180 mg/l Algae EC ₅₀ (72 hour): 0.084mg/l Northern bobwhite LD ₅₀ 21days: 346mg/kg Tebuconazole - Rainbow trout LC ₅₀ (96 hour): 4.4mg/l <i>Daphnia magna</i> EC ₅₀ (48 hour): 4mg/l <i>Lemna gibba</i> frond EC ₅₀ (72 hour) 0.01444mg/L Bobwhite quail (acute oral) LD ₅₀ : 1555mg/kg



Section 13: Disposal considerations

Product disposal:	Dispose of this product only by using according to the label or through Agrecovery chemical disposal or similar approved service or at an approved landfill.
Container disposal:	Triple rinse empty container adding rinsate to the spray tank. Recycle through Agrecovery if possible or appropriate recycling facility. Otherwise crush and bury in an approved landfill. Do not use container for any other purpose.

Section 14: Transport information

UN number:	3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (contains tebuconazole 1%, Oocthilinone 1.75%)
UN class:	9
Packing group:	III
HAZCHEM:	3Z
Marine pollutant:	Yes

This product is classified as a Dangerous Good. Consult the Land Transport Rule: Dangerous Goods 2005 and NZS 5433:2020 Transport of Dangerous Goods on Land for more information.

Section 15: Regulatory information

HSNO:	Approved substance under the HSNO Act 1996.
Substance approval number:	HSR100149; Greenseal Ultra
Tolerable exposure limit:	Not set.
HSNO controls:	See www.epa.govt.nz
Additional controls:	This substance must not be applied onto or into water. Apply only via non-dispersive application methods.
ACVM:	Registered under the Agricultural Compounds Veterinary Medicines Act 1997.
Registration number:	P8180
Conditions of registration:	See www.foodsafety.govt.nz

Section 16: Other information

Date of issue:	20/04/2023
Reason for reissue:	Product information review; change to GHS hazard statements and following EPA review of classifications for tebuconazole classifications.
Replaces:	SDS issued 15/03/2019

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Information references:	Supplier Safety Data Sheet NZ EPA Approved hazardous substances database. NZ EPA Chemical Classification and Information Database (CCID)
Abbreviations:	ACVM: Agricultural Chemicals and Veterinary Medicines Group HSNO: Hazardous substances and New Organisms Act 1996 (HSNO Act) EPA: Environmental Protection Authority of New Zealand CAS Number: Chemical Abstracts Service Number LD50: Lethal Dose 50% (Population) LC50: Lethal Concentration 50% (Population) WES-TWA: Workplace exposure standards – Time-weighted average WES-STEL: Workplace exposure standards – Short-term exposure limit

The data provided in this safety data sheet is based on current knowledge and experience. The purpose of this document is to describe the product in terms of its safety requirements. The above details do not imply any guarantee concerning composition, properties or performance of the product.