

1: Identification of the Substance and Supplier

Product Name	GUVNOR GOLD
Recommended Use	Herbicide
Suppliers Details	Orion AgriScience Ltd Unit 1, 15 Sir Gil Simpson Drive, Harewood, Christchurch, 8053 PO Box 39 071, Harewood, Christchurch, 8545
Web Address	www.orionagriscience.co.nz
Email Address	orders@orionagriscience.co.nz
Telephone Number	(03) 928 2386 (office hours), 0800 674 6627 (free phone)
Emergency Telephone	0800 CHEMCALL (0800 243 622) (24 hours)
National Poison Centre	0800 POISON (0800 764 766) (24 hours)
Date of Issue/Revision	March 2025

2: Hazards Identification

Hazard Pictograms



Signal Words

Hazard Classes:

Acute Toxicity Inhalation (Cat. 4)
Eye Irritation (Cat. 2)
Skin Sensitisation (Cat. 1)
Hazardous to the Aquatic Environment Acute (Cat. 1)
Hazardous to the Aquatic Environment Chronic (Cat. 1)
Hazardous to Soil Organisms

Precautionary Statements:

Prevention

Warning

Hazard Statements:

H332 Harmful if inhaled
H319 Causes serious eye irritation
H317 May cause an allergic skin reaction
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H421 Very toxic to the soil environment

P101 If medical advice is needed, have product container or label at hand
P102 Keep out of reach of children
P103 Read carefully and follow all instructions
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P264 Wash hands thoroughly after handling
P280 Wear protective gloves/protective clothing/eye protection/face protection
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/eye/face protection
Read label before use. Avoid contact with eyes and skin. Do not breathe in the vapour or spray mist. When mixing or applying, wear personal protection as described in section 8. Take all reasonable steps to ensure that this product does not cause any significant adverse effects to the environment beyond the application area. Do not apply directly into or onto water.

Response

P304+P340 IF INHALED: Move person to fresh air and keep comfortable for breathing
P302+P352 IF ON SKIN: Wash with plenty of water
P333+P313 If skin irritation or rash occurs: Get medical advice/attention
P312 Call a POISON CENTRE/doctor if you feel unwell
P321 Specific treatment (Refer to section 4)
P362+P364 Take off contaminated clothing and wash it before reuse

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing
P337+P313 If eye irritation persists: Get medical advice/attention
P304+P340 IF INHALED: Move person to fresh air and keep comfortable for breathing
P391 Collect spillage
First aid measures described in section 4. Contain and collect spillage for disposal. In an emergency call 111, Police or Fire Brigade. For specialist advice in an emergency only, call 0800 CHEMCALL (0800 243 6225) (24 hrs).
Store in the original tightly closed container in a secure area
P501 Dispose of contents by using it in accordance with this label. Dispose of the container via AgRecovery after triple rinsing (use the rinsate for spraying).

Storage
Disposal

3: Composition/ Information on Ingredients

Ingredient	CAS No	Content (% w/v)
S-metolachlor	87392-12-9	96
Benoxacor	98730-04-2	<10
Other ingredients	Proprietary	Remainder

4: First Aid Measures

If medical advice is needed, have product container or label at hand. For advice call the National Poisons Centre or a Doctor

Ingestion:	Seek medical advice if feeling unwell.
Skin Contact:	Wash with plenty of soap and water. Seek medical attention if irritation or rash occurs.
Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if easy to do so. Continue rinsing. Seek medical advice if irritation persists.
Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical help.
Workplace Facilities:	Hand wash facility. Eye wash facility
Advice to Doctor:	No specific antidote. Treat symptomatically.
National Poison Centre	0800 POISON (0800 764 766) (24 hours)

Symptoms of Exposure which could occur if this material is not handled in accordance with instructions:

Ingestion:	No data available
Skin Contact:	Irritation. Contact may induce an allergic response in susceptible individuals.
Eye Contact:	Irritation
Inhalation:	Irritation, headache, dizziness, nausea, vomiting

5: Fire-Fighting Measures

Fire/Explosion Hazard	Non-Flammable (but will be combustible in a fire)
HAZCHEM Code	3Z
ERP Guide No	171/47
Extinguishing Media	Water spray, foam, dry chemical or CO2. Avoid water jet.
Fire Fighting Instructions	During a fire, toxic fumes may be emitted. Wear self-contained breathing apparatus. Contain runoff.
Specific Hazards Arising from Fire	No data available

6: Accidental Release Measures

Personal Precautions	Caution: Floors may be slippery if wet. Wear personal protective clothing and equipment as described in section 8. Exclude non-essential people from the area.
Environmental Precautions	Prevent further spillage or leakage. Prevent material from entering drains, waterways, etc.

Clean Up

Absorb spillage with inert material such as spill kit, sand or cat litter. Collect and place in a sealable container for disposal. Wash down affected area with water and detergent. Absorb and collect washings for disposal. Dispose of safely to a suitable landfill.

7: Handling and Storage

Storage:

Keep out of reach of children. Store in the original tightly closed container in a secure area.

Handling and Use:

Refer to Prevention statements in section 2 above. Exclude people and animals from the application area, both during application and for the duration of the REI.

REI

Until spray has dried

8: Exposure Controls / Personal Protection

Tolerable Exposure Limit

None established

Workplace Exposure Standards

None established (Use lowest practicable level)

Engineering Controls

Select spray application equipment to minimize exposure to operator and bystanders

Personal Protection:

The following Standards provide general advice regarding safety clothing and equipment:
Respiratory equipment: AS/NZS 1715, Protective Gloves: AS 2161, Occupational Protective Clothing: AS/NZS 4501, Industrial Eye Protection: AS1336 and AS/NZS 1337, Occupational Protective Footwear: AS/NZS2210

Eye

Safety glasses/goggles when mixing or applying

Skin

Chemical resistant overalls snugly fitting at the neck, wrist and ankle, boots and gloves

Respiratory

Not required where vapour or spray mist is not inhaled. Otherwise, respirator (organic vapour and particulate matter) is required.

Clean protective equipment after use

9: Physical and Chemical Properties

Appearance

Yellow to Brown Liquid

Odour

Solvent like

Odour Threshold

Does not apply

pH

Does not apply

Melting Point/Freezing Point

Does not apply

Boiling Point

Does not apply

Flash Point

>93°C

Flammability

Does not apply

Upper/Lower Flammability Limits

Does not apply

Vapour Pressure

Does not apply

Vapour Density

Does not apply

Relative Density

1.10 g/mL (approx.)

Solubility in Water

Emulsifiable

Partition Coefficient: n-octanol/water

See section 12

Auto ignition Temperature

Does not apply

Decomposition Temperature

Does not apply

Kinematic Viscosity

Does not apply

Particle characteristics

Does not apply

10: Stability and Reactivity

Stability

Stable under normal conditions

Hazardous Reactions

None Expected

Incompatibility

None Known

Hazardous Decomposition Products

None Known

11: Toxicological Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

Acute Oral Toxicity	LD50 > 2000 mg/kg
Acute Dermal Toxicity	LD50 > 20000 mg/kg
Acute Inhalation Toxicity	LD50 > 1 mg/L
Skin corrosion/irritation	Information not available
Serious eye damage/Eye irritation	Eye Irritant
Respiratory or skin sensitisation	May cause an allergic skin reaction in susceptible individuals
Germ cell mutagenicity	Information not available
Carcinogenicity	Information not available
Reproductive Toxicity	Information not available
Specific Organ Toxicity – Single exposure	Information not available
Specific Organ Toxicity – Repeated exposure	Information not available
Aspiration hazard	Information not available

12: Ecological Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

The following information is presented in respect of the active ingredient:

Ecotoxicity	<ul style="list-style-type: none"> Acute Oral LD50 (Rat) 2267 mg/kg LC50 (96 hr) (Rainbow trout) 1.23 mg/l LC50 (48 hr) (Daphnia) 11.24 mg/l EC50 (72 hr) (Algae) 0.058 mg/l Non toxic to bees 	
Persistence/degradability	Biodegradable. DT50 (soil) 90 days (typical)	
Bioaccumulative Potential	Octanol-water partition coefficient	LogP = 3.4 (high)
Soil Mobility	Soil organic carbon water partitioning coefficient	Koc = 120 (moderately mobile)
Environmental Exposure Limit:	None set	

13: Disposal Considerations

Product	Dispose of product by using it in accordance with the label. Waste product should be disposed of to a suitable landfill. For disposal of large quantities contact Orion AgriScience Ltd.
Container	Dispose of to a suitable landfill or via AgRecovery. Do not burn. Do not use packaging for any other purpose.

14: Transport Information

Dangerous Goods	
UN Number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (S-METOLACHLOR 96%)
Class	9
Subsidiary Class	None
Packing Group	III
Additional Information	MARINE POLLUTANT
MTQ (Non-Commercial)	1000 litres

Passenger Service Vehicle

1 litre

15 Regulatory Information

EPA Approval No	HSR100968
ACVM Registration No	P9821
Qualified Person	Required
Certified Handler	Not required
Workplace Only	No
Tracking	Not required
Record Keeping	Not required (unless > 3 L applied within 24 hours, and which is likely to leave the application area)
Site Requirements under EPA Notice and HSWHS Regs:	<ul style="list-style-type: none"> • A hazardous substance location compliance certificate is not required • A hazardous area is not required • Separation distances for class 3 and class 6 substances to protected places and public places is not applicable • Fire extinguishers are not required • Signage is required for more than 100 litres • An emergency response plan is required for more than 100 litres • Secondary containment is required for more than 100 litres • Segregation from incompatible substances – Segregate from Class 1 (Explosives) and Class 5 (Oxidisers and Organic Peroxides)
Additional Requirements	Refer to NZS 8409:2021 'Management of Agrichemicals', and relevant local and regional council plans

16: Other Information

Glossary	
ADE	Acceptable Daily Exposure – A daily dose, received via any route, below which no adverse effects are expected over a lifetime of exposure
ACVM	Agricultural Compounds and Veterinary Medicines group of the Ministry of Primary Industries
Cat.	GHS category
Ceiling	A concentration that should not be exceeded at any time during any part of the working day
Certified Handler	A qualification issued by a Compliance Certifier to handle and use particularly toxic substances (Acute Toxicity Category 1 or 2 – Oral, Dermal or Inhalation)
DT50	Time (days) for 50% reduction in concentration
EC50	Concentration required to produce an effect in 50% of organisms
EEL	Environmental Exposure Limit
Environmental Exposure Limit	Maximum concentration limit of a substance in an environmental medium, e.g., water, soil.
EPA Notice	Hazardous Property Controls Notice 2017
ER Guide	Australian and New Zealand Emergency Response Guide Book
GHS	Globally harmonized system of classification and labelling of chemicals
Hazardous Substance Location Compliance Certificate	For locations storing hazard substances of certain classes above threshold quantities
Hazardous Area	A designated area designed for the presence of flammable substances - Refer AS/NZS 60079.10.1:2009
HAZCHEM Code	Emergency action code for emergency services
HSHPC Notice	Hazardous Substances (Hazardous Property Controls) Notice 2017
HSWHS Regs	Health and Safety at Work (Hazardous Substances) Regulations 2017
LC50	Concentration that will kill 50% of organisms
LD50	Dose that will kill 50% of organisms
MTQ	Maximum Transport Quantity. The maximum amount of dangerous goods that can be transported by road

SAFETY DATA SHEET

GUVERNOR GOLD



Notification	by the user Advance notice given to neighbours and other affected parties, of details of proposed application, and other details as described
Octanol-Water Partition Coefficient	The partition coefficient of a substance between n-octanol and water, used as the Logarithm base 10 form, as an indicator that a substance may bioaccumulate
PDE	Permitted Daily Exposure - A daily dose below which no adverse effects are expected over a lifetime of exposure
Protected Place	Residential properties, schools, hospitals, kindys, factories, shops, warehouses, etc., and other places where people assemble
Public Place	A place frequented by the public, including roads (does not include private property)
Qualified Person	A requirement for the loader, contractor or person applying the product to hold a qualification such as a GROWSAFE Certificate, Unit Standard 21563, etc.
Record Keeping	Includes a spray diary or other record of application
REI	Restricted Entry Interval – The length of time after application before entry into the treated area is permitted without the use of protective equipment. For indoor environments, this time period commences once ventilation after treatment begins.
Segregation	Certain classes of substances must not be in contact with, and must be stored separately from, certain other classes as specified in HSWHS Regs and the HSHPC Notice
Separation Distances	The distances specified in Part 11 and Part 13 of HSWHS Regs between storage and/or use of hazardous substances and protected places and/or public places of certain classes above threshold quantities
Signage	Positioned at entrances to commercial premises providing information on the hazardous substances present
Soil Adsorption Coefficient (Kd)	The ratio of the concentrations of a substance adsorbed onto a solid sorbent to that dissolved in a liquid phase. The higher the value the less mobile the chemical is in soil
Soil Organic Carbon-Water Partitioning Coefficient (Koc)	The ratio of the mass of a chemical that is adsorbed in the soil per unit mass of organic carbon in the soil. The higher the value the less mobile the chemical is in soil
STEL	Short term exposure level – 15 minute time weighted average
Tolerable Exposure Limit	Maximum concentration limit of a substance above which persons must not be exposed
Tracking	For some particularly hazardous substances, a record must be kept of the transport, storage, sale and use of the product
TWA	Time weighted average calculated over an 8 hour working day
Workplace Exposure Standard	An occupational health standard limiting concentrations of specified substances to which persons are exposed
Workplace Only	A product that is restricted to a workplace only and under the supervision of a certified handler
Please Note	

Users must ensure that the most up to date version of this safety data sheet is used.

This Safety Data Sheet summarises information on this product, and how to safely handle and use the product. Each user should familiarise themselves with the product label and Safety Data Sheet, and consider the information in the context of how the product will be handled and used, including in conjunction with other products. Orion AgriScience Ltd assumes no responsibility for the accuracy, completeness or suitability of this information. The user is responsible for determining the suitability and accuracy of this information for their particular purposes.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.