

MATERIAL SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE:

Hazardous according to the criteria of NOHSC

COMPANY DETAILS:

Syngenta Crop Protection Pty Limited
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Level 1, 2-4 Lyon Park Road
NORTH RYDE, NSW 2113

Telephone No.: (02) 8876 8444
24 Hours Emergency No.: 1 800 033 111

IDENTIFICATION

PRODUCT NAME: RIDOMIL® Gold Plus Systemic Fungicide

Formulation type:	wettable powder	UN Number:	UN-2775
Active Ingredients:	- metalaxyl-M - copper (as copper hydroxide)	Dangerous Goods Class/ and Subsidiary Risk:	6.1
Product Code No.:	A-9601 B	Hazchem Code:	2X
Chemical types:	- phenylamide - inorganic salt	Packing Group:	III
		Poisons Schedule:	6

USE: Fungicide for the control of downy mildew on grapevines, and phytophthora trunk canker and root rot of macadamia nuts.

PHYSICAL DESCRIPTION/PROPERTIES

Appearance:	Sky blue powder	Behaviour in water:	Suspensible
Odour:	Clay-like aroma	Flash Point:	Not applicable
Specific Gravity:	Not applicable	Flammability:	Not applicable

OTHER PROPERTIES

Bulk Density:	0.37 g/cm ³	Viscosity:	Not applicable
pH (at 25°C):	8-10 (1% suspension in water)	Volatility:	Not known
Explosive properties:	Exotherm onset point: 262°C Endotherm onset point: ~150°C	Corrosiveness:	Non-corrosive to packaging

INGREDIENTS -

	CAS No.	Content (%w/w)
copper hydroxide (technical grade)		>60
to give copper hydroxide	[20427-59-2]	60
metalaxyl-M (technical grade)		<5
to give metalaxyl-M	[70630-17-0]	5
alkyl naphthalene sulphonate, sodium salt		<10
amorphous precipitated silicas and silicates (synthetic)		10 - 20
amorphous silica (natural)		<10
other ingredients determined not to be hazardous		to 100%

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE

Toxicity - This product is slightly hazardous (WHO Hazard Class III)

Swallowed:	MODERATE TOXICITY Tests on rats indicate moderate toxicity following single doses of undiluted product. (LD ₅₀ = 1010 mg/kg, males; 550 mg/kg, females)
Dermal absorption:	SLIGHT TOXICITY Tests on rabbits indicate a slight toxicity following skin contact with undiluted product. (LD ₅₀ >2020 mg/kg)
Inhaled:	SLIGHT TOXICITY

Tests on rats indicate a slight toxicity due to inhalation of undiluted product.
(LC₅₀ = 1730 mg/m³)

Irritation -

Eye: **SEVERE IRRITANT** (based on studies on the constituents of the product)
Skin: **SLIGHT IRRITANT** (based on studies with rabbits)

Sensitisation -(based on results on guinea pigs).

Skin: **NOT A SENSITISER**

Poisoning symptoms: No case of human poisoning due to this product is on record. The poisoning symptoms observed for laboratory mammals were non-specific for **metalaxyl-M**.

CHRONIC (Active Ingredients)

Metalaxyl-M, either as technical grade Metalaxyl-M or as a 50% component of technical grade metalaxyl, has been extensively tested on laboratory mammals and in test-tube systems. No evidence of carcinogenic, mutagenic, teratogenic or reproductive effects was obtained.

Copper is an essential dietary element. Chronic over-exposure may cause anaemia.

FIRST AID

In case of poisoning by any exposure route contact a doctor or Poisons Information Centre. Phone 131 126.

Swallowed: If more than 15 minutes from emergency medical care, induce vomiting preferably using Ipecac Syrup (APF).
Eye: Flush with large quantities of clean tap water for at least 15 minutes.
Skin: Remove contaminated clothing and wash affected areas thoroughly with soap and water.
Inhaled: Move affected person to fresh air and keep at rest until recovered.

ADVICE TO DOCTOR

No specific antidote exists. Treat symptomatically.

PRECAUTIONS FOR USE**ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS****EXPOSURE STANDARDS**

Ingredient	Occupational Exposure Standard (NOHSC)
copper hydroxide	1 mg/m ³ , as Cu (8hr time weighted average)
silica - amorphous	10 mg/m ³ (8hr time weighted average)
nuisance particulate dust	10 mg/m ³ (8hr time weighted average)

No exposure standards have been set for the other components of this product.

Exposure Potential - Swallowing is unlikely under normal conditions of usage. Significant skin uptake does not occur. Inhalation is a possible route of exposure. This product is diluted with water prior to use as a spray. This diluted form is less toxic by all routes of exposure.

Re-entry Period - Do not enter treated areas without protective clothing until spray has dried.

ENGINEERING CONTROLS

No special requirements. Product is used outdoors.

PERSONAL PROTECTION

Harmful if swallowed. Will damage eyes. May irritate the skin. Avoid contact with the eyes and skin. Do not inhale dust.

When using the prepared spray wear:

- cotton overalls buttoned to the neck and wrist (or equivalent clothing),
- elbow-length PVC gloves and
- face shield or goggles.

If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

FLAMMABILITY

This product is NON-FLAMMABLE.

SAFE HANDLING INFORMATION

Store in tightly sealed original containers in a dry secure place away from fertilisers, seed, feed, food and acids. This product is incompatible with ammonia and acid vapours. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals. Store and transport according to the requirements for a Class 6.1 dangerous good.

Transport Classification – Road and Rail (ADG), Sea (IMDG):

UN No.: 2775 **Proper Shipping Name:** COPPER BASED PESTICIDE, SOLID, TOXIC
Class: 6.1
Packing Group: III **Additional Information:** COPPER HYDROXIDE, 60%

SPILLS AND DISPOSAL

In case of spillage it is important to take all steps necessary to:

- Avoid eye and skin contact.
- Avoid contamination of waterways

Procedure for spill:

- (1) Keep all bystanders away.
- (2) Wear full length clothing and PVC gloves.
- (3) Reposition any leaking containers so as to minimise leakage.
- (4) **For a product spill:** Sweep powder concentrate into a pile.
For a prepared spray spill: Dam and absorb spill with an absorbent material (eg. sand or soil).
- (5) Shovel the absorbed material or powder concentrate into drums.
- (6) Disposal of the absorbed material will depend upon the extent of the spill.
 - For quantities up to 50 kg of product bury in a secure landfill site.
 - For quantities greater than 50 kg seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.
- (7) Decontaminate the spill area with detergent and water and rinse with water.

Dispose of empty, used containers by:

- (a) Single rinsing foil pack before disposal. Add rinsings to the spray tank. **DO NOT** dispose of undiluted chemicals on-site.
- (b) Puncturing and burying the container to prevent reuse.
- (c) Disposing of in a local authority landfill site. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

FIRE/EXPLOSION HAZARD

This product is non-flammable and non-explosive.

OTHER INFORMATION

Metalaxyl-M technical is practically non-toxic to fish, birds and bees.

Copper hydroxide is slightly toxic to fish and practically non-toxic to bees.

Note: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Federal health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

CONTACT POINT: Regulatory Affairs Manager - Crop Protection - (02) 8876 8444
24 HOURS EMERGENCY CONTACT: 1 800 033 111

This Material Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

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

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