

MATERIAL SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE:

Hazardous according to the criteria of Worksafe Australia

COMPANY DETAILS:

Syngenta Crop Protection Pty Limited
ABN 33 002 933 717
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: Switch[®] Fungicide

Formulation type:	water dispersible granule	UN Number:	3077
Active Ingredient:	cyprodinil / fludioxonil	Dangerous Goods Class/ and Subsidiary Risk:	9
Product Code No.:	A-9219B	Packing Group	III
Chemical type:	anilinopyrimidine / phenylpyrrole	Hazchem Code:	2X
		Poisons Schedule:	5

USE: Fungicide for the control of grey mould (*Botrytis cinerea*) in grapes.

PHYSICAL DESCRIPTION/PROPERTIES

Appearance:	grey to brown granule	Flash Point:	Not available
Melting Point:	Not available	Flammability:	Not flammable
Vapour pressure:	Not available	Combustibility:	Not combustible
Bulk density (50 taps):	0.537 g/cm ³	Solubility in water:	Dispersible in water

OTHER PROPERTIES

pH:	9 (1% in water)	Corrosiveness:	Not corrosive
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INGREDIENTS

	CAS No.	Content (%w/w)
cyprodinil technical		>37.5
to give cyprodinil	121552-61-2	37.5
Fludioxonil technical		>25
to give fludioxonil	131341-86-1	25
calcined diatomaceous silica	61790-53-2	<10
dibutylnaphthalene sulphonic acid, sodium salt	25417-20-3	<10
other ingredients determined not to be hazardous		to 100

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE

Toxicity -

This product is unlikely to present a hazard during normal use (WHO Hazard Class III).

Swallowed:	LOW TOXICITY Tests on rats indicate a low toxicity following single doses of formulated product. (LD ₅₀ = >5000 mg/kg)
Dermal absorption:	LOW TOXICITY Tests on rats indicate a low toxicity due to skin contact with formulated product. (LD ₅₀ = >2000 mg/kg)
Inhaled:	LOW TOXICITY Tests on rats indicate a low toxicity due to inhalation of undiluted product. (LC ₅₀ (4 h) = >1200 mg/m ³ for technical cyprodinil) (LC ₅₀ (4 h) = >2600 mg/m ³ for technical fludioxonil)

Irritation (based on an evaluation of the formulated product on rabbit studies)

Eye: **NON IRRITANT**

Skin: **NON IRRITANT**

Sensitisation (based on studies with guinea pig)

Skin: **NON-SENSITISER**

CHRONIC (Active Ingredient)

Cyprodinil technical and **Fludioxonil technical** have been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, carcinogenic, teratogenic or reproductive effects was obtained with each substance.

FIRST AID

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

Swallowed: If large quantities are ingested, drink plenty of water and seek medical attention.

Eye: Flush with large quantities of clean tap water for at least 15 minutes.

Skin: Avoid contact with skin. If skin contact occurs remove contaminated clothing and wash affected areas thoroughly with soap and water.

Inhaled: Move 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

The NOHSC exposure standard for silica is 10 mg/m³ of inspirable air, time-weighted average (TWA).

This product is a granule formulation and is unlikely to result in silica dust exceeding this limit under normal use conditions.

No exposure standards have been assigned for fludioxonil, cyprodinil or any of the other ingredients.

Exposure Potential - Swallowing is unlikely under normal conditions of usage. Significant skin uptake does not occur. 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 the spray has dried.

ENGINEERING CONTROLS

No special requirements. Product is used outdoors.

PERSONAL PROTECTION

Will irritate the eyes. Avoid contact with eyes. If product in eyes, wash it out immediately with water.

When opening the container, preparing spray and using the prepared spray wear:

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

Wash hands after use. After each day's use, wash gloves, faceshield or goggles and contaminated clothing.

FLAMMABILITY

This product is NON-FLAMMABLE and is not combustible.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

Store in tightly sealed original containers in a dry secure place away from fertilisers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.

Transport Classification – Sea (IMDG):

UN No.:	3077	Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS
Class:	9		SUBSTANCE, SOLID, N.O.S.
Packing Group:	III	Additional Information:	CYPRODINIL 37.5%, FLUDIOXONIL 25%, MARINE POLLUTANT

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 granule 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 granule 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 liner bag with water. Add the rinsings to the tank mix or dispose of rinsate in a disposal pit away from desirable plants and their roots, and watercourses. On-site disposal of undiluted product is unacceptable.
- (b) Crushing or puncturing the container to prevent reuse.
- (c) Disposing of in a local authority landfill site that does not burn its refuse. If there is no local authority landfill readily available in your area, bury the containers under at least 50 cm of soil at a licensed/approved disposal site. **DO NOT** burn empty containers or product.

FIRE/EXPLOSION HAZARD

This product is non-flammable and non explosive. Extinguish warehouse and factory fires using fine water-spray or foam. When fighting a major fire wear a respirator. Do not allow fire-water to enter drains.

OTHER INFORMATION

SWITCH FUNGICIDE IS HIGHLY TOXIC TO AQUATIC ORGANISMS. DO NOT apply if heavy rains are imminent. DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto adjacent areas, particularly wetlands, waterbodies, or watercourses.

Highly toxic to fish (Bluegill $LC_{50} = 1.8$ mg/L), crustacea (*Daphnia magna* EC_{50} (48h) = 0.14 mg/L) and algae.

SWITCH Fungicide is practically non-toxic to birds, earthworms, and bees; and relatively non-toxic to beneficial insects.

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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