



Material Safety Data Sheet

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1. IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

Product Name: **CITRIGAN PLUS**
Recommended Use: Agricultural fungicide
Supplier: ADAMA South Africa (Pty) Ltd
Address: 21 Viben Street
Brackenfell
7560
Telephone No: +27 (0) 21 982 1460
Fax No: +27 (0) 21 982 5810
Emergency Tel No: Griffon Poison Information Centre +27 82 446 8946

2. HAZARD IDENTIFICATION ON PRODUCT

Hazard: **N = Dangerous for the environment**
Xi = Irritant
NON HAZARDOUS SUBSTANCE – NON DANGEROUS GOOD
Classification: Classified as **Not Hazardous** according to the criteria of NOHSC
Risk Phrases: Oral: Category 5 or Unclassified
Dermal: Category 5 or Unclassified
Inhalation: Unclassified
Dermal irritation: Not classified as a skin irritant
Eye irritation: Mild irritating to Eyes (Category 2B)
Skin sensitivity: Not considered as positive
R50/53: Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment (a.i.)
Safety Phrases: S60/S61: This material and its container must be disposed of as hazardous waste. Avoid release to the environment

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(s)	CAS NO	UN Code	Classification	Concentration (g/l)
Propiconazole	60207-90-1	3082	Xi (irritant);R43	120
Pyrimethanil	53112-28-0	3077	N (dangerous to environment) R51/53	150
Inerts			Non hazardous	

4. FIRST AID MEASURES

Show this MATERIAL SAFETY DATA SHEET to a doctor

- INGESTION:**
- Not considered as harmful with normal exposure, but if swallowed, DO NOT induce vomiting. Have person sip a glass of water if able to swallow.
- INHALATION:**
- No classification. Treat symptomatically. Remove patient from source of exposure. And move to fresh air.
- EYES:**
- Mildly irritating to eyes. Treat symptomatically. Remove any contact lenses. Rinse eyes immediately with plenty of clean water for at least 15 minutes. Hold eyelids apart while flushing.
- SKIN:**
- Not considered a skin irritant. Treat symptomatically. Remove contaminated clothing and take a shower.
- MEDICAL ATTENTION:**
- Treat symptomatically.
- POTENTIAL HEALTH AFFECTS:**
- No significant adverse effects were reported. Practically non-toxic.

5. FIRE FIGHTING MEASURES

- SUITABLE EXTINGUISHING MEDIA:**
- Extinguishing media - small fires:
 - Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
 - Extinguishing media - large fires:
 - Alcohol resistant foam, water spray
 - DO NOT use a solid water stream as it may scatter and spread fire.
- HAZARDS PRODUCTS FROM COMBUSTION:**
- In a fire, formation of oxides of carbon and nitrogen can be expected.
- PRECAUTIONS FOR FIRE FIGHTERS:**
- Fire fighters should wear full protective gear including self-contained breathing apparatus. If possible, safely remove intact containers from the fire.
- HAZCHEM CODE:**
- 2X.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK:

- Avoid contact with spilled material or contaminated surfaces.
- DO NOT eat, drink or smoke.
- Wear personal protective clothing and equipment (see section 8). Keep people and animals away.
- PREVENT spilled material from entering drains or sewer systems. Dike and bund area with sand or earth to prevent contamination of drains or sewers.

7. HANDLING AND STORAGE

- PRECAUTIONS FOR SAFE HANDLING:**
- Always store pesticides in their original containers, which include the label listing ingredients, directions for use, and first aid steps in case of accidental poisoning. **Never transfer** pesticides to soft drink bottles or other containers. Children or others may mistake them for something to eat or drink.
 - Keep out of reach of children
 - Wear suitable protective clothing (Dust mask, Eye shields, Gloves)
 - Wash hands, arms and face after use. Wash gloves and contaminated protective clothing daily.
- CONDITIONS FOR SAFE STORAGE:**
- DO NOT re-use the container for any other purpose.
 - Store in the closed original container in a cool, dry and well ventilated, secure area.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

- NATIONAL EXPOSURE STANDARDS:** No exposure standards have been assigned for this product.
- BIOLOGICAL LIMIT VALUES:** No biological limit allocated.
- ENGINEERING CONTROLS:** Facilities should be equipped with an eyewash facility and a safety shower.
- PERSONAL PROTECTIVE EQUIPMENT:** Wear suitable protective clothing (Dust mask, Eye shields, Gloves).

9. PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE (colour; physical form):** Dark yellow liquid
- ODOUR:** Strong chemical odour (Almond)
- PH:** 6.3
- DENSITY:** 1.02 g/mℓ
- FASH POINT** 86 °C
- PERSISTENT FOAMING:** 34 mℓ
- LOW TEMPERATURE STABILITY:** Visible stable

10. STABILITY AND REACTIVITY

- CHEMICAL STABILITY:** Stable under normal conditions of use.
- CONDITIONS TO AVOID:** Excessive heat, freezing.

11. TOXICOLOGICAL INFORMATION

ANIMAL ACUTE TOXICITY DATA

ORAL:	LD ₅₀ (rat)	5 000 mg/kg (Unclassified)
DERMAL:	LD ₅₀ (rat)	> 2000 mg/kg bw
INHALATION:	LC ₅₀ (rat)	5.333 mg/ℓ (4h) (Unclassified)
DERMAL IRRITATION:	(OECD 404)	Not classified as an irritant (rabbits)
EYE IRRITATION:	(OECD 405)	Mildly irritating to the eyes (rabbit) (Category 2B)
SENSITISATION:	Guinea pig	Not positive as a skin sensitizer

CITRIGAN PLUS is not known to pose a carcinogenic or endocrine disrupter risk to humans

12. ECOLOGICAL INFORMATION (a.i.)

ECOTOXICITY:	Birds : LD ₅₀ (oral)	Mallard ducks: > 2510 mg/kg Propiconazole (a.i.), > 2000 mg/kg Pyrimethanil Bobwhite quail: 2825 mg/kg. Propiconazole (a.i.), > 5200 mg/kg Pyrimethanil
	Fish : LC ₅₀ (96h)	Rainbow trout: 5.3 mg/ℓ Propiconazole (a.i.); 10.56 mg/ℓ Pyrimethanil Spot croaker 2.6 mg/ℓ Propiconazole (a.i.)
	Daphnia: LC ₅₀ (48h)	0.48 mg/ℓ Propiconazole (a.i.); 2.9 mg/ℓ Pyrimethanil
	Bees: LD ₅₀ (oral and contact)	>100 ug/ bee Propiconazole (a.i.); >100 ug/ bee Pyrimethanil
	Earthworms: LC ₅₀ (14d)	>1000 mg/kg Propiconazole (a.i.); 625 mg/kg Pyrimethanil dry soil dry soil

PERSISTENCE, DEGRADABILITY and MOBILITY:

Propiconazole (soil) has a very low potential for leaching(GUS 1.51) (non-mobile) DT₅₀ soil 214 d. Pyrimethanil (soil) has a low potential for leaching (GUS 2.65) (Transition compound) DT₅₀ soil 54 d.

13. DISPOSAL CONSIDERATIONS

Do not use fungicide containers or packaging material for storing water or food. Triple or preferable pressure rinse empty containers with clean water before disposal. Add rinsing to spray/mixing tank. Do not dispose of undiluted chemical on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. IF NOT recycling, break crush or puncture and bury empty containers in a local authority landfill. 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 any water source (river, dam, spring, or borehole). Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

UN NUMBER:	3082
PROPER SHIPPING NAME:	Environmentally hazardous substance, liquid, n.o.s. (contains propiconazole)
CLASS AND SUBSIDIARY RISK(S):	Class 9
GHS PACKING GROUP:	4
HAZCHEM CODE:	2X

15. REGULATORY INFORMATION

Not applicable

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) 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 to prevent accidents in the normal workplace including in conjunction with other products.

The information was obtained from sources which we believe are reliable. However, the information is provided in good faith. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and for this reasons we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used for this product only.

END of MSDS