



Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

Product Name: **CITRIGAN**
Recommended Use: Agricultural fungicide
Supplier: ADAMA South Africa (Pty) Ltd
Address: 21 Viben Street
Brackenfell
Cape Town
Telephone No: 021 982 1460
Fax No: 021 982 5810
Emergency Tel No: Griffon Poison Information Centre +27 82 446 8946
Poisons Helpline 0861 555 777

2. HAZARD IDENTIFICATION ON PRODUCT

Hazard classification

Xi = Irritant
N = Dangerous for the environment



Hazard statement: Harmful if swallowed
May cause an allergic skin reaction
Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(s)	CAS NO	UN Code	Classification	Concentration (g/l)
Propiconazole	60207-90-1	3082	Xn, R22,43,50/53	250
Inerts			Non hazardous	

4. FIRST AID MEASURES

Show this MATERIAL SAFETY DATA SHEET to a doctor

- INGESTION:**
- If swallowed, DO NOT induce vomiting. Have person sip a glass of water if able to swallow.
- INHALATION:**
- Prolonged exposure may irritate the respiratory tract. 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:**
- Treat symptomatically. Remove contaminated clothing and take a shower.
 - Rinse affected areas (skin) immediately with plenty of water.
- MEDICAL ATTENTION:**
- Treat symptomatically.
- POTENTIAL HEALTH AFFECTS:**
- No significant adverse effects with normal use.

5. FIRE FIGHTING MEASURES

- FLASH POINT:**
- ~106 °C
- 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:**
- As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion

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. Keep fire exposed containers cool by spraying with water.

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 a well-ventilated, cool, dry, secure area. Protect from heat, sparks and flame. Do not expose containers to temperatures above 40 °C. This product is a combustible liquid.

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):

Light brown liquid

ODOUR:

Slight Aldehyde odour

PH:

~6.8 (5.8 to 7.8)

DENSITY:

~1.09 g/mℓ

FASH POINT

~105 °C

PERSISTENT FOAMING:

~14 mℓ

ACCELERATE STORAGE STABILITY:

Stable

LOW TEMPERATURE STABILITY:

Visible stable

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:

Stable under normal conditions of use.

CONDITIONS TO AVOID:

Heat and freezing.

11. TOXICOLOGICAL INFORMATION

ANIMAL ACUTE TOXICITY DATA (similar product)

ORAL:	LD ₅₀ (rat)	2 105 mg/kg
DERMAL:	LD ₅₀ (rat)	4250 mg/kg bw
INHALATION:	LC ₅₀ (rat)	>1 mg/ℓ (4h) (Unclassified)
DERMAL IRRITATION:	(OECD 404)	Moderate dermal irritant (rabbit)
EYE IRRITATION:	(OECD 405)	Moderate eye irritant (rabbit)
SENSITISATION:	Guinea pig	Not positive as a skin sensitizer

12. ECOLOGICAL INFORMATION (a.i.)

ECOTOXICITY:	Birds : LD ₅₀ (oral)	Mallard ducks: > 2510 mg/kg Bobwhite quail: 2825 mg/kg
	Fish : LC ₅₀ (96h)	Rainbow trout: 5.3 mg/ℓ Spot croaker 2.6 mg/ℓ
	Daphnia: LC ₅₀ (48h)	0.48 mg/ℓ
	Bees: LD ₅₀ (oral and contact)	>100 ug/ bee
	Earthworms: LC ₅₀ (14d)	686 mg propiconazole a.i./kg dry soil
PERSISTENCE, DEGRADABILITY and MOBILITY:		Propiconazole (soil) has a very low potential for leaching(GUS 1.51) (non-mobile) DT ₅₀ soil 214 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:	3
MARINE POLLUTANT	YES
HAZCHEM CODE:	2X

15. REGULATORY INFORMATION Safety, health and environmental regulations

Risk Phrases:	R36	Irritating to eyes
	R42/43	May cause sensitization by inhalation and skin contact
	R51/53	Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment (a.i.)
Safety Phrases:	S1/2	Keep locked up and out of the reach of children
	S3/7/9/47	Keep container tightly closed in a cool, well-ventilated place
	S13	Keep away from food, drink and animal foodstuffs
	S20/21	When using do not eat, drink or smoke
	S25	Avoid contact with eyes
	S27/28	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water
	S36/37/38	Wear suitable protective clothing, gloves and goggles
	S46	If swallowed, seek medical advice immediately and show this container or label
	S60/S61	This material and its container must be disposed of as hazardous waste. Avoid release to the environment

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