

# KOMBAT FUNGI FREE

Version: 1.2

Revision Date: December 2016



## 1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY UNDERTAKING:

### PRODUCT INFORMATION

**Product Name** : KOMBAT FUNGI FREE

**Design Code** : A12531B

**Registration No.** : L8759, Act No. 36 of 1947

**Use** : Insecticide

**Company** : Kombat (Pty) Ltd  
39 Dr. Gordon Road  
Greytown  
3250

**Telephone** : +27-33-417-1906/7



Harmful



Dangerous for  
the environment

### EMERGENCY TELEPHONE NUMBERS

#### SPILLAGES:

Emergency telephone: +27-82-446-8946 (all hours)

#### POISONING INCIDENTS:

Poison Information Centre of the Western Cape: +27-861-555-777 (all hours)  
Griffon Poison Information Centre +27-82-446-8946 (all hours)  
UFS Pharmacology/Toxicology information centre: +27-82-491-0160

## 2. HAZARD IDENTIFICATION

Harmful by inhalation and if swallowed.  
Irritating to respiratory system.  
May cause sensitization by skin contact.  
Limited evidence of a carcinogenic effect.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components

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Chemical Name	CAS-No.	EC-No.	Symbol(s)	R-phrases(s)	Concentration
chlorothalonil	1897-45-6	217-588-1	T+, N	R26 R37 R40 R41 R43 R50/53	54 % W/W
1,2-propanediol	57-55-6	200-338-0			1 - 5 % W/W

\*indicates substances for which there are Community workplace exposure limits. For the full text of the R-phrases mentioned in this Section, see Section 16.

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#### 4. FIRST- AID MEASURES

- General advice :** Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or physician, or going for treatment.
- Inhalation :** Remove to fresh air.  
If breathing is irregular or stopped, administer artificial respiration.  
Keep patient warm and at rest.  
Call a physician or poison information centre immediately.
- Skin contact :** Take off contaminated clothing and shoes immediately.  
Wash off immediately with plenty of water.  
If skin irritation persists, call a physician.  
Wash contaminated clothing before re-use.
- Eye contact :** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Remove contact lenses.  
Immediate medical attention is required.
- Ingestion :** If swallowed, seek medical advice immediately and show this container or label.  
Do NOT induce vomiting.
- Medical advice :** There is no specific antidote available. Treat symptomatically.
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#### 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

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Alcohol-resistant foam  
Or  
Water spray

**Extinguishing media  
which shall not be used  
for safety reasons :**

Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards during  
fire fighting :**

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).  
Exposure to decomposition products may be a hazard to health.

**Special protective  
equipment for fire-  
fighters :**

Wear full protective clothing and self-contained breathing apparatus.

**Further information :**

Do not allow run-off from fire fighting to enter drains or water courses.  
Cool closed containers exposed to fire with water spray.

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions :**

Refer to protective measures listed in sections 7 and 8.

**Environmental  
precautions :**

Prevent further leakage or spillage if safe to do so.  
Do not flush into surface water or sanitary sewer system.

**Methods for cleaning up :**

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

**Additional advice :**

If the product contaminates rivers and lakes or drains inform respective authorities.

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## 7. HANDLING AND STORAGE

### HANDLING

**Advice on safe handling :**

No special protective measures against fire required.  
Avoid contact with skin and eyes.  
When using, do not eat, drink or smoke.  
For personal protection see section 8.

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**STORAGE****Requirements for storage****Areas and containers :**

No special storage conditions required.

Keep containers tightly closed in a dry, cool and well-ventilated place.

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

**8. EXPOSURE CONTROL / PERSONAL PROTECTION****Components with workplace control parameters**

Components	Exposure limit(s)	Type of exposure limit	Source
chlorothalonil	0.1 mg/m <sup>3</sup>	8 h TWA	SYNGENTA
1,2-propanediol	10 mg/m <sup>3</sup> Particulates 150 ppm Total (vapour & 470 mg/m <sup>3</sup> particulates)	8 h TWA	UK HSE

**ENGINEERING MEASURES**

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

If airborne mists or vapours are generated, use local exhaust ventilation controls.

Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.

Where necessary, seek additional occupational hygiene advice.

**PERSONAL PROTECTIVE EQUIPMENT****Protective measures :**

The use of technical measures should always have priority over the use of personal protective equipment.

When selecting personal protective equipment, seek appropriate professional advice.

Personal protective equipment should be certified to appropriate standards.

**Respiratory protection :**

A combination gas, vapor and particulate respirator may be necessary until effective technical measures are installed.

Protection provided by air-purifying respirators is limited.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

**Hand protection :**

Chemical resistant gloves should be used.

Gloves should be certified to an appropriate standard.

Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure.

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The breakthrough time of gloves varies according to the thickness, material and manufacturer.

Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Suitable material

Nitrile rubber

**Eye protection :**

Eye protection is not usually required.

Follow any site specific eye protection policies.

**Skin and body protection :**

Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material.

Wash with soap and water after removing protective clothing.

Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.)

Wear as appropriate: impervious protective suit

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**9. PHYSICAL AND CHEMICAL PROPERTIES****Form :**

suspension

**Melting point/range :**

-5 °C

**Boiling point/boiling range :**

100 °C

**Oxidizing properties :**

Not oxidizing

**Explosive properties :**

Not explosive

**Density :**

1.333 g/cm<sup>3</sup> at 20 °C

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**10. STABILITY AND REACTIVITY****Hazardous decomposition products:**

Combustion or thermal decomposition will evolve toxic and irritant vapours.

**Hazardous reactions :**

None known.

Hazardous polymerization does not occur.

Stable under normal conditions.

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**11. TOXICOLOGICAL INFORMATION****Acute oral toxicity :**

Median lethal dose female Rat, 2,000 mg/kg

GHS-Classification Category 4

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The toxicological data has been taken from products of similar composition.

**Acute inhalation toxicity :** Median lethal concentration male Rat, > 1.5 mg/l, 4 h  
Median lethal concentration female Rat, 0.86 - 1.5 mg/l, 4 h  
GHS-Classification Category 3  
The toxicological data has been taken from products of similar composition.  
Irritating to respiratory system.  
GHS-Classification Category 3  
The toxicological data has been taken from products of similar composition.

**Acute dermal toxicity :** LD50 Rabbit, > 2,000 mg/kg  
GHS-Classification None  
The toxicological data has been taken from products of similar composition.

**Skin irritation :** Rabbit: Mildly Irritating  
GHS-Classification None  
The toxicological data has been taken from products of similar composition.

**Eye irritation :** Rabbit: Mildly Irritating  
GHS-Classification None

**Sensitisation :** Guinea pig: A skin sensitizer in animal tests.  
GHS-Classification Category 1  
The toxicological data has been taken from products of similar composition.

**Long term toxicity :** Did not show mutagenic effects in animal experiments.  
Chlorothalonil causes kidney tumours in rats and mice via a non-genotoxic mode of action secondary to target organ toxicity.  
IARC Class 2B compound  
Did not show reproductive toxicity effects in animal experiments.  
Did not show teratogenic effects in animal experiments. No adverse effects in humans are expected at levels below the occupational exposure limit and when the product is handled and used according to the label.  
This information refers to Chlorothalonil.

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## 12. ECOLOGICAL INFORMATION

### ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

**Bioaccumulation :** Chlorothalonil has low potential for bioaccumulation.

**Stability in water :** Degradation half life: 20 - 59 d at 20 °C  
Chlorothalonil is not persistent in water.

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Degradation half life : 1 - 12 d



Chlorothalonil is not persistent in soil.

**Mobility :**

Chlorothalonil has low to slight mobility in soil.

**ECOTOXICITY EFFECTS****Toxicity to fish :**LC50 *Oncorhynchus mykiss* (rainbow trout), 61 µg/l , 96 h

GHS-Classification Category 1

Based on test results obtained with similar product.

**Toxicity to daphnia and other aquatic invertebrates :**EC50 *Daphnia magna* (Water flea), 180 µg/l , 48 h

GHS-Classification Category 1

Based on test results obtained with similar product.

**Toxicity to algae :**EbC50 *Pseudokirchneriella subcapitata* (green algae), 0.13 mg/l , 72 h

Derived from components.

: ErC50 *Pseudokirchneriella subcapitata* (green algae), 0.24 mg/l , 72 h

GHS-Classification Category 1

Derived from components.

**13. DISPOSAL CONSIDERATIONS****Product :**

Do not contaminate ponds, waterways or ditches with chemical or used container.

Do not dispose of waste into sewer.

Where possible recycling is preferred to disposal or incineration.

If recycling is not practicable, dispose of in compliance with local regulations.

**Contaminated packaging :**

Empty remaining contents.

Triple rinse containers.

Empty containers should be taken to an licensed plastics recycler for recycling or disposal.

Do not re-use empty containers.

**14. TRANSPORT INFORMATION****Land transport**

ADR/ RID:

UN-Number: 3082

Class: 9

Labels: 9

Packaging group III

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Version 2, Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Revision 01, Date of revision : 2016

**Sea transport***IMDG:*

UN-Number: 3082

Class: 9

Labels: 9

Packaging group: III

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(CHLOROTHALONIL)

Marine pollutant : Marine pollutant

**Air transport***IATA-DGR*

UN-Number: 3082

Class: 9

Labels: 9

Packaging group: III

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(CHLOROTHALONIL)

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**15. REGULATORY INFORMATION****Labelling according to EC Directives**

Hazardous components which must be listed on the label:

- chlorothalonil

**Symbol(s) :**

Xn	Harmful
N	Dangerous for the environment

**R-phrases(s) :**

R20/22	Harmful by inhalation and if swallowed.
R37	Irritating to respiratory system.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-phrases(s) :**

S 2	Keep out of the reach of children.
S13	Keep away from food, drink and animal feedingstuffs.
S20/21	When using do not eat, drink or smoke.
S35	This material and its container must be disposed of in a safe way.
S36/37	Wear suitable protective clothing and gloves.
S57	Use appropriate container to avoid environmental contamination.

**Special labelling of**



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To avoid risks to man and the environment, comply with the instructions for use.



**Note :** The preparation is classified as dangerous in accordance with Directive 1999/45/EC.

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## 16. OTHER INFORMATION

### Further information

Text of R-phrases mentioned in Section 3:

- R26** Very toxic by inhalation.
- R37** Irritating to respiratory system.
- R40** Limited evidence of a carcinogenic effect.
- R41** Risk of serious damage to eyes.
- R43** May cause sensitisation by skin contact.
- R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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