

# SAFETY DATA SHEET



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## 1) IDENTIFICATION OF THE SUBSTANCE / PREPARATION

Commercial name: **FINALE<sup>®</sup> LIQUID RAT AND MOUSE BAIT**

Usage: Rodenticide

Company identification: Bayer (Pty.) Ltd.  
Reg. No. 1968/011192/07  
P.O. Box 143, Isando 1600  
SOUTH AFRICA

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Responsible department: Marketing and Technical  
+27 11 921 5310/5663/5471/5639  
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In case of poisoning emergencies:  
Bayer (office hours only): +27 11 921 5310/5663/5471/5639  
Tygerberg Poison Centre: +27 21 931 6129  
Griffon Poison Information Centre: +27 82 446 8946

## 2) HAZARD IDENTIFICATION OF THE PRODUCT

Risk advice to man and the environment: Harmful in contact with skin and if swallowed.  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Because of anti-vitamin K properties of the active ingredient, absorption can inhibit blood coagulation and cause haemorrhagic syndrome.

## 3) COMPOSITION / INFORMATION ON THE INGREDIENTS

Chemical nature: Bait (CB)  
Difethialone 0.5 g/l

Hazardous components:

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Difethialone	104653-34-1	T+, N	R26/27/28, R48/23/24/25, R50/53	0,05

For the full text of the R phrases mentioned in this Section, see Section 16.

## 4) FIRST AID MEASURES

General advice: Symptoms of poisoning may only appear several hours later.

Skin: Wash off with soap and water. If signs of poisoning occur, call a physician immediately.

Eye: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Inhalation: Call a physician or poison control center immediately. Move to fresh air. Keep patient warm and at rest.

Ingestion: Do NOT induce vomiting. Rinse out mouth and give water in small sips to drink. Ingest activated charcoal. Call a physician or poison control center immediately.

### NOTES TO PHYSICIAN:

Symptoms: Bloody vomiting, nose bleeding, gum bleeding, bloody urine, bloody faeces. Symptoms generally appear only after several hours.

Risks: Because of anti-vitamin K properties of the active ingredient, absorption can inhibit blood coagulation and cause haemorrhagic syndrome. Delayed toxic effects (anticoagulation) of 36 to 72 hours.

Treatment: Elementary aid, decontamination and symptomatic treatment.  
Antidote: Vitamin K<sub>1</sub> - 10 mg i.v., if necessary repeat; in cases of grave bleeding: prothrombin complex preparates. Monitor the blood clotting time (prothrombin time).

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## 5) FIRE FIGHTING MEASURES

Suitable extinguishing media: Dry powder, carbon dioxide (CO<sub>2</sub>), alcohol resistant foam.

In the event of fire the following can be released: Carbon monoxide (CO), Sulphur oxides, hydrogen bromide (HBr), bromine.

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus. Wear full protective suit.

Further information: Do not allow run-off from fire fighting to enter drains or water courses.

## 6) ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment.

Environmental precautions: Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Keep in suitable, closed containers for disposal.

Additional advice: Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

## 6) ACCIDENTAL RELEASE MEASURES

Personal protection: Wear suitable protective clothing; avoid skin contact and inhalation. Eliminate all ignition sources, no smoking in the vicinity. Report incident to emergency personnel in the event of a large spill.

Environmental protection: Prevent contamination of sewers, waterways, low areas, drinking water, crops and/or grazing. The material is toxic to fish, birds and wildlife.

Methods for cleaning: Immediately dike spill. Absorb liquid spillage with sand, earth or other suitable inert absorbent material, carefully shovel up and transfer to salvage container; mark container "HAZARDOUS WASTE". Dispose of as for hazardous waste in accordance with local/national regulations.

Prevention of secondary hazards: Inspect for damaged containers and take the necessary precautions.

Protective clothing: Chemical impermeable gloves, safety goggles or face shield, effective respiratory protection or self-contained breathing apparatus as dictated by circumstances, full length protective clothing, apron and boots.

## 7) HANDLING AND STORAGE

Handling: Advice on safe handling: For personal protection see section 8. Ensure adequate ventilation.

Advice on protection against fire and explosion: Keep away from heat and sources of ignition.

Storage: Requirements for storage areas and containers: Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage: Keep away from food, drink and animal feedingstuffs.

Storage stability: Storage period: 24 months  
Storage temperature: < 15 °C

## 8) EXPOSURE CONTROLS AND PERSONAL PROTECTION

Manufacturing: Respiratory protection: Wear respirator with an organic vapour and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection: Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

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Eye protection:	Wear goggles conforming to EN166 (Field of Use 5 or equivalent).
Skin and body protection:	Wear standard coverall and type 6 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Keep away from food, drink and animal feedingstuffs. Wash hands immediately after work, if necessary take a shower.
Protective measures:	Do not inhale vapours. Avoid contact with skin and eyes.
In normal use and handling conditions:	Wear rubber gloves and wash hands after handling. Avoid contact with skin and eyes.

## 9) PHYSICAL AND CHEMICAL PROPERTIES

Description:	A clear, deep blue, free flowing liquid.
Flash point:	ca 97 °C
Density at 25 °C:	1,036 g/cm <sup>3</sup>
Solubility:	Difethialone, technical in water at 25 °C 0,39 mg/l ; slightly soluble in acetone and ethanol.

## 10) STABILITY AND REACTIVITY

Hazardous reactions:	No hazardous reactions when stored and handled according to prescribed instructions. Stable under recommended storage conditions.
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## 11) TOXICOLOGICAL INFORMATION

Acute toxicity: (active ingredient)

LD <sub>50</sub> acute oral, rats:	0,56 mg/kg
LD <sub>50</sub> acute oral, mice:	1,29 mg/kg
LD <sub>50</sub> acute percutaneous, rats:	5,3 mg/kg
LC <sub>50</sub> (4 hours) acute inhalation, rats:	5 to 19,3 µg/l air

During intended and foreseen applications of the product, no respirable aerosol is formed.

Skin irritation, rabbit: No skin irritation\*

Eye irritation, rabbit: No eye irritation\*

Sensitization, guinea pig: Non-sensitizing\*

\*Tests conducted with a similar formulation.

Repeated dose toxicity:

Oral, rat: Exposure time: 90 day  
LOEL (Lowest observable effect level): 0,004 mg/kg  
The value mentioned relates to the active ingredient difethialone.

Oral, dog: Exposure time: 90 day  
LOEL (Lowest observable effect level): 0,020 mg/kg  
The value mentioned relates to the active ingredient difethialone.

## 12) ECOLOGICAL INFORMATION

Toxicity to fish:

LC<sub>50</sub>: 0,051 mg/l Rainbow trout *Oncorhynchus mykiss*  
Exposure time: 96 h  
The value mentioned relates to the active ingredient difethialone.

Toxicity to daphnia:

EC<sub>50</sub>: 0,0044 mg/l Water flea *Daphnia magna*  
Exposure time: 48 h  
The value mentioned relates to the active ingredient difethialone.

Toxicity to algae:

Algae: 0,065 mg/l

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Exposure time: 96 h  
The value mentioned relates to the active ingredient difethialone.

## 13) DISPOSAL CONSIDERATIONS

Product: Must not be disposed of together with household garbage.  
Do not allow product to reach sewage system.  
Dispose of as hazardous waste.

Contaminated packaging: Do not use containers for other products.  
Consult state and local regulations regarding the proper disposal of container.

## 14) TRANSPORT INFORMATION

UN Number: 3082

Class: 9

IMDG: -

Ems: F-A, S-F

MFAG: -

Subsidiary risk: •

Packing group: III

Declaration for land shipment: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFETHIALONE SOLUTION)

Declaration for sea shipment: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFETHIALONE SOLUTION)

Declaration for shipment by air: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIFETHIALONE SOLUTION)

Marine pollutant

## 15) REGULATORY INFORMATION

Classification and labelling in accordance with the EC Directive on dangerous preparations 1999/45/EC as amended.

Classification: Hazard warning labelling compulsory.

Hazardous components which must be listed on the label: Difethialone.

Symbol(s):

Xn: Harmful.

N: Dangerous for the environment.

R-phrases(s):

R21/22: Harmful in contact with skin and if swallowed.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s):

S35: This material and its container must be disposed of in a safe way.

S36/37: Wear suitable protective clothing and gloves.

S46: If swallowed, seek medical advice immediately and show this container or label.

S57: Use appropriate container to avoid environmental contamination.

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

WHO Classification: II (moderately hazardous).

## 16) OTHER INFORMATION

Text of R phrases mentioned in Section 3:

R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.

R48/23/24/25: Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products

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in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

Consult the label for directions for use.

THIS INFORMATION CONCERNS ONLY THE PRODUCT AS CONFORMING TO ITS SPECIFICATIONS AND LIMITED TO THE USES HEREIN STATED.

This sheet complements the technical sheet of use but does not replace it. The information contained on this sheet is based on knowledge of the product on the date of publication. It is given in good faith.

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