



RODILON TRIO

Version 5 / GB
102000024321

1/11
Revision Date: 10.08.2017
Print Date: 15.09.2017

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name RODILON TRIO

Product code (UVP) 79906366

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use Rodenticide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer Environmental Science
230 Cambridge Science Park
Milton Road
Cambridge
Cambridgeshire CB4 0WB
United Kingdom

Telephone 00800-1214 9451

Telefax +44(0)1223 426240

Responsible Department Email: ukinfo@bayercropscience.com

1.4 Emergency telephone no.

Emergency telephone no. 0800-220876 (UK 24 hr)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Specific target organ toxicity - repeated exposure: Category 2

H373 May cause damage to organs (Blood) through prolonged or repeated exposure.

Chronic aquatic toxicity: Category 3

H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Difethialone



Signal word: Warning

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006



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Hazard statements

H373 May cause damage to organs (Blood) through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
P260 Do not breathe dust.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P314 Get medical advice/ attention if you feel unwell.
P501 Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

2.3 Other hazards

Because of antivitamin K properties of the active ingredient, absorption can inhibit blood coagulation and cause haemorrhagic syndrome.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Bait (ready for use) (RB)
Difethialone 0.0025 % w/w

Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification	Conc. [%]
		REGULATION (EC) No 1272/2008	
difethialone	104653-34-1	Aquatic Chronic 1, H410 Acute Tox. 1, H330 STOT RE 1, H372 Acute Tox. 1, H300 Acute Tox. 1, H310 Repr. 1B, H360D Aquatic Acute 1, H400	0.0025

Further information

difethialone	104653-34-1	M-Factor: 100 (acute), 100 (chronic)
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For the full text of the H-Statements mentioned in this Section, see Section 16.



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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely. Keep under medical supervision for at least 48 hours.
Skin contact	Wash off immediately with soap and plenty of water. Take off contaminated clothing and shoes immediately. If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. If eye irritation or redness persists, see an ophthalmologist.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	If large amounts are ingested, the following symptoms may occur: Bloody urine, Bloody faeces, Gum bleeding, Nose bleeding, Bruising and haemorrhage formation Symptoms and hazards refer to effects observed after intake of significant amounts of the active ingredient(s).
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4.3 Indication of any immediate medical attention and special treatment needed

Risks	Because of antivitamin K properties of the active ingredient, absorption can inhibit blood coagulation and cause haemorrhagic syndrome.
Treatment	Symptoms of poisoning may appear several hours later. Keep under medical supervision for at least 48 hours. Local treatment: Initial treatment: symptomatic. Systemic treatment: Monitor: blood picture. Monitor: prothrombin time/ INR. Antidote: Vitamine K1. Cases of severe poisoning may require the usual measures like application of blood products or transfusions. Recovery is spontaneous and without sequelae. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable	Water spray, Carbon dioxide (CO ₂), Foam, Sand
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5.2 Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.
5.3 Advice for firefighters	
Special protective equipment for firefighters	In the event of fire, wear self-contained breathing apparatus.
Further information	Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions Keep people away from and upwind of spill/leak. Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke.

6.2 Environmental precautions Do not allow to get into surface water, drains and ground water. If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Check also for any local site procedures.

6.4 Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid dust formation.

Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).



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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in original container and out of the reach of children, preferably in a locked storage area. Keep away from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

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

7.3 Specific end use(s) Refer to the label and/or leaflet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

No control parameters known.

8.2 Exposure controls

Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004). Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection Respiratory protection is not required under anticipated circumstances of exposure.
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

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Material	Nitrile rubber
Rate of permeability	> 480 min
Glove thickness	> 0.4 mm
Protective index	Class 6
Directive	Protective gloves complying with EN 374.

Eye protection Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection Wear standard coveralls and Category 3 Type 5 suit.
If there is a risk of significant exposure, consider a higher protective type 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.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	cereals
Colour	red
Bulk density	> 500 kg/m ³
Water solubility	immiscible
Partition coefficient: n-octanol/water	Difethialone: log Pow: 6.3

9.2 Other information Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition Stable under normal conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No hazardous reactions when stored and handled according to prescribed instructions.

10.4 Conditions to avoid Extremes of temperature and direct sunlight.

10.5 Incompatible materials Store only in the original container.

10.6 Hazardous decomposition products No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 5,000 mg/kg

Acute inhalation toxicity During intended and foreseen applications, no respirable aerosol is formed.

Acute dermal toxicity LD50 (Rat) > 2,000 mg/kg

Skin irritation No skin irritation (Rabbit)

Eye irritation No eye irritation (Rabbit)

Sensitisation Non-sensitizing. (Guinea pig)

Assessment STOT Specific target organ toxicity – single exposure

Difethialone: Based on available data, the classification criteria are not met.



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Assessment STOT Specific target organ toxicity – repeated exposure

Difethialone caused inhibition of blood coagulation possibly causing hemorrhagic syndrome in animal studies. The toxic effects of Difethialone are related to antivitamin K properties.

Assessment mutagenicity

Difethialone was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Difethialone is not considered carcinogenic.

Assessment toxicity to reproduction

Difethialone: May damage the unborn child.

Assessment developmental toxicity

Difethialone did not cause developmental toxicity in rats and rabbits.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 51 µg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient difethialone.

Chronic toxicity to fish Oncorhynchus mykiss (rainbow trout)
NOEC: 22 µg/l
The value mentioned relates to the active ingredient difethialone.

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 4,4 µg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient difethialone.

Chronic toxicity to aquatic invertebrates NOEC (Daphnia magna (Water flea)): 3 µg/l
The value mentioned relates to the active ingredient difethialone.

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 65 µg/l
Biomass; Exposure time: 96 h
The value mentioned relates to the active ingredient difethialone.
NOEC (Raphidocelis subcapitata (freshwater green alga)) 32 µg/l
The value mentioned relates to the active ingredient difethialone.

12.2 Persistence and degradability

Biodegradability Difethialone:
Not rapidly biodegradable

12.3 Bioaccumulative potential

Bioaccumulation Difethialone: Bioconcentration factor (BCF) 39,974
Bioaccumulative

12.4 Mobility in soil



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Mobility in soil Difethialone: Immobile in soil

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment Difethialone: This substance is considered to be persistent, bioaccumulative and toxic (PBT). This substance is considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Additional ecological information No other effects to be mentioned.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant. Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

Contaminated packaging Do not re-use baits or empty containers. Not completely emptied packagings should be disposed of as hazardous waste. Follow advice on product label and/or leaflet. Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Dispose of empty and cleaned packaging safely. Large containers (> 25 l or > 25 kg) should not be rinsed or re-used for any other purpose. Return large containers to supplier.

Waste key for the unused product **06 13 01*** Inorganic plant protection products, wood-preserving agents and other biocides

SECTION 14: TRANSPORT INFORMATION

According to ADN/ADR/UK 'Carriage' Regulations/RID/IMDG/IATA not classified as dangerous goods.

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

14.1 – 14.5 Not applicable.

14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

No transport in bulk according to the IBC Code.



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SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

UK and Northern Ireland Regulatory References

This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.

Transport

Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No 1348)

Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No 2367)

Air Navigation Dangerous Goods Regulations 2002 (SI 2002 No 2786)

Supply and Use

Chemical (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716)

Chemical (Hazard Information and Packaging for Supply) (Northern Ireland) Regulations 2009

Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No 2677)

EH40 Occupational Exposure Limits - Table 1 List of approved workplace exposure limits

Control of Pesticide Regulations 1986

Dangerous Substances and Explosive Atmospheres Regulations 2002

Waste Treatment

Environmental Protection Act 1990, Part II

Environmental Protection (Duty of Care) Regulations 1991

The Waste Management Licensing Regulations 1994 (as amended)

Hazardous Waste Regulations 2005 (Replacing Special Waste Regulations 1996 as amended)

Landfill Directive

Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94)

Water Resources Act 1991

Anti-Pollution Works Regulations 1999

Further information

WHO-classification: III (Slightly hazardous)

15.2 Chemical safety assessment

A chemical safety assessment is not required.

SECTION 16: OTHER INFORMATION

Text of the hazard statements mentioned in Section 3

H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H360D	May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.



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H410 Very toxic to aquatic life with long lasting effects.

Ready to use 'Baits' are insecticides packaged in plastic, tamper proof containers.

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EH40 WEL	Worker Exposure Limit
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SI	Statutory Instrument
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

The above information is intended to give general health and safety guidance on the storage and transport of the product.

It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with.

The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given.

The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate.

No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

Note :

This data sheet has been generated according to the safety data sheet supplied by the manufacturer of the product.

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006



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Liphatech S.A.S.

Reason for Revision:

The following sections have been revised: Section 11: Toxicological information on STOT (Specific Target Organ Toxicity) and CMR (Carcinogenic, Mutagenic and toxic to Reproduction).

Safety Data Sheet according to Regulation (EU) No. 2015/830. The following sections have been revised: Section 2: Hazards Identification. Section 4: First Aid Measures. Section 5: Fire Fighting Measures. Section 11: Toxicological Information. Section 13. Disposal considerations. Section 16: Other Information.

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