



RACUMIN FOAM

Version 4 / GB
102000025363

1/12
Revision Date: 29.01.2018
Print Date: 29.01.2018

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

1.1 Product identifier

Trade name RACUMIN FOAM
Product code (UVP) 80260997

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. 00800 1020 3333 (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.

Flammable aerosols: Category 1
H222 Extremely flammable aerosol.

Reproductive toxicity: Category 1B
H360D May damage the unborn child.

Specific target organ toxicity - repeated exposure: Category 2
H373 May cause damage to organs (Blood) through prolonged or repeated exposure.

Eye irritation: Category 2
H319 Causes serious eye irritation.

Chronic aquatic toxicity: Category 2
H411 Toxic 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.



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Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Coumatetralyl
- Isotridecylalcohol-6-ethoxylate
- Butane
- Propane



Signal word: Danger

Hazard statements

- H222 Extremely flammable aerosol.
- H229 Pressurised container: May burst if heated.
- H360D May damage the unborn child.
- H373 May cause damage to organs (Blood) through prolonged or repeated exposure.
- H319 Causes serious eye irritation.
- H411 Toxic to aquatic life with long lasting effects.
- EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
Restricted to professional users.

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P251 Do not pierce or burn, even after use.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.
- 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

Pressurised container, heating will cause pressure rise with a risk of bursting.
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

Aerosol dispenser (AE)
Coumatetralyl 0,4 %

Hazardous components

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

Name	CAS-No. /	Classification	Conc. [%]
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	EC-No. / REACH Reg. No.	REGULATION (EC) No 1272/2008	
Coumatetralyl	5836-29-3 227-424-0	Acute Tox. 1, H330 Acute Tox. 2, H300 Acute Tox. 2, H310 STOT RE 1, H372 Aquatic Chronic 3, H412	0.40
Isotridecylalcohol-6-ethoxylate	69011-36-5 500-241-6	Acute Tox. 4, H302 Eye Dam. 1, H318	> 1.00 – < 3
Glycerine	56-81-5 200-289-5	Not classified	> 1.00
Butane	106-97-8 203-448-7 01-2119474691-32-xxxx	Flam. Gas 1, H220 Press. Gas	> 1.00
Propane	74-98-6 200-827-9 01-2119486944-21-xxxx	Flam. Gas 1, H220 Press. Gas	> 1

Further information

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

General advice	Move out of dangerous area. When symptoms develop and persist, seek medical advice. Place and transport victim in stable position (lying sideways).
Inhalation	Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.
Skin contact	Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. 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. Get medical attention if irritation develops and persists.
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately. Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	If large amounts are ingested, the following symptoms may occur: Internal and external bleeding, shock possible 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



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Risks	Because of antivitamin K properties of the active ingredient, absorption can inhibit blood coagulation and cause haemorrhagic syndrome.
Treatment	Treat symptomatically. Antidote: Vitamine K1. Cases of severe poisoning may require the usual measures like application of blood products or transfusions. Necessity and efficacy have to be assessed by INR. 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. Monitor: blood picture.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

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 and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Further information Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. 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 Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment. Remove all sources of ignition.

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).



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6.3 Methods and materials for containment and cleaning up

Methods for cleaning up The nature of this product, when contained in commercial packs, makes spillage unlikely. However, if significant amounts are spilled nevertheless, the following advice is applicable. Clean contaminated floors and objects thoroughly, observing environmental regulations. Collect and transfer the product into a properly labelled and tightly closed container.

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.

Advice on protection against fire and explosion The product is extremely flammable. Keep away from heat and sources of ignition. Take measures to prevent the build up of electrostatic charge. Fire or intense heat may cause violent rupture of packages.

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

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep out of reach of children and animals. Keep away from direct sunlight. Protect from freezing.

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

Suitable materials Aluminium with interior coating

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Coumatetralyl	5836-29-3	0.01 mg/m ³ (TWA)		OES BCS*

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Glycerine (Mist.)	56-81-5	10 mg/m ³ (TWA)	12 2011	EH40 WEL
Butane	106-97-8	1,810 mg/m ³ /750 ppm (STEL)	12 2011	EH40 WEL
Butane	106-97-8	1,450 mg/m ³ /600 ppm (TWA)	12 2011	EH40 WEL

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

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.

Personal protective equipment is not normally required. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered.

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 6 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.

If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	aerosol
Colour	dark blue
Odour	weak, characteristic
Density	ca. 0.95 g/cm ³ at 20 °C
Water solubility	miscible
Partition coefficient: n-octanol/water	Coumatetralyl: log Pow: 1.5 at 20 °C at pH 7

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 ATE (Mix) (Rat) > 2,000 mg/kg
Acute toxicity estimate
Calculation method

Acute inhalation toxicity ATE (Mix) (Rat) > 5.0 mg/l
Acute toxicity estimate
Calculation method

Acute dermal toxicity ATE (Mix) (Rat) > 5,000 mg/kg
Acute toxicity estimate
Calculation method

Skin irritation No skin irritation (Rabbit)



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The information is derived from the properties of the individual components.

Eye irritation

Irritating to eyes. (Rabbit)
The information is derived from the properties of the individual components.

Sensitisation

Non-sensitizing. (Guinea pig)
The information is derived from the properties of the individual components.

Assessment STOT Specific target organ toxicity – single exposure

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

Assessment STOT Specific target organ toxicity – repeated exposure

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

Assessment mutagenicity

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

Assessment carcinogenicity

Coumatetralyl is not considered carcinogenic.

Assessment toxicity to reproduction

Coumatetralyl is not considered a reproductive toxicant at non-maternally toxic dose levels.

Assessment developmental toxicity

Coumatetralyl: May damage the unborn child.

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)) 53 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient coumatetralyl.

Chronic toxicity to fish

Oncorhynchus mykiss (rainbow trout)
NOEC: 5 µg/l
Exposure time: 21 d
The value mentioned relates to the active ingredient.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) > 14 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient coumatetralyl.

Chronic toxicity to aquatic invertebrates

NOEC (Daphnia magna (Water flea)): 0.1 mg/l
Exposure time: 21 d
The value mentioned relates to the active ingredient.

Toxicity to aquatic plants

IC50 (Desmodesmus subspicatus (green algae)) > 18 mg/l



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Growth rate; Exposure time: 96 h
The value mentioned relates to the active ingredient coumatetralyl.

12.2 Persistence and degradability

Biodegradability Coumatetralyl: < 60 %,
Not readily biodegradable.

Koc Coumatetralyl: Koc: 258

12.3 Bioaccumulative potential

Bioaccumulation Coumatetralyl: Bioconcentration factor (BCF) 11.4
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil Coumatetralyl: Moderately mobile in soils

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment Coumatetralyl: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not 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 Disposal of the liquid product when not contained in the aerosol container by incineration in an appropriately licensed commercial incinerator.
Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

Contaminated packaging Ensure aerosol container is empty before disposal.
Dispose of empty and cleaned packaging safely.
Not completely emptied packagings should be disposed of as hazardous waste.

Waste key for the unused product **16 05 04*** gases in pressure containers (including halons) containing hazardous substances

SECTION 14: TRANSPORT INFORMATION

ADR/RID/ADN

14.1 UN number	1950
14.2 Proper shipping name	AEROSOLS
14.3 Transport hazard class(es)	2.1
14.4 Packing group	NOT APPLICABLE.
14.5 Environm. Hazardous Mark	NO
Hazard no.	NOT APPLICABLE.
Tunnel Code	D

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

IMDG

14.1 UN number	1950
14.2 Proper shipping name	AEROSOLS
14.3 Transport hazard class(es)	2.1
14.4 Packing group	NOT APPLICABLE.
14.5 Marine pollutant	NO

IATA

14.1 UN number	1950
14.2 Proper shipping name	AEROSOLS, FLAMMABLE
14.3 Transport hazard class(es)	2.1
14.4 Packing group	NOT APPLICABLE.
14.5 Environm. Hazardous Mark	NO

UK 'Carriage' Regulations

14.1 UN number	1950
14.2 Proper shipping name	AEROSOLS
14.3 Transport hazard class(es)	2.1
14.4 Packing group	NOT APPLICABLE.
14.5 Environm. Hazardous Mark	NO

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.

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



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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

H220	Extremely flammable gas.
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H372	Causes damage to organs (Blood) through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms

SI	Statutory Instrument
EH40 WEL	Worker Exposure Limit
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
ECx	Effective concentration to x %
EC-No.	European community number
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
Conc.	Concentration
LCx	Lethal concentration to x %



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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
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2015/830 amending Regulation (EU) No 1907/2006 and any subsequent amendments. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Reason for Revision: Safety Data Sheet according to Regulation (EU) No. 2015/830. The following sections have been revised: Section 2: Hazards Identification. Section 3: Composition / Information on Ingredients. Section 4: First Aid Measures. Section 6. Accidental Release Measures. Section 7: Handling and Storage. Section 8: Exposure Controls / Personal Protection.

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

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.