## 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 CropScience SA-NV<br>BG Bayer Environmental Science<br>J.E. Mommaertslaan 14<br>1831 Diegem (Machelen)<br>Belgium |
| **Telephone** | +32(0)2/535 63 11 (24 h response / 7 days) |
| **Telefax** | +32(0)2/534 35 76 |
| **Responsible Department** | Email: riek.rombaut@bayer.com |

### 1.4 Emergency telephone no.

| | |
|---|---|
| **Bayer CropScience SA-NV** | +32(0)2/535 63 11 (24 h response / 7 days) |
| **Belgium National Chemical Emergency Center** | +32(0)70/245 245 (24 h response / 7 days) |
| **National Chemical Emergency Center (Luxemburg)** | +352 8002 5500 (24 h response / 7 days) |

## 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 according to Belgian and Luxemburgian legislation:**

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. |
| H319 | Causes serious eye irritation. |
| H360D | May damage the unborn child. |
| H373 | May cause damage to organs (Blood) through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |

**Precautionary statements**

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Do not pierce or burn, even after use. |
| P260 | Do not breathe gas/ mist/ vapours/ spray. |
| P264 | Wash hands thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P410 + P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. |
| P501 | Dispose of contents/container to a collection site for dangerous and special 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. / EC-No. / REACH Reg. No. | Classification REGULATION (EC) No 1272/2008 | Conc. [%] |
|---|---|---|---|
| Coumatetralyl | 5836-29-3<br>227-424-0 | Repr. 1B, H360D<br>Acute Tox. 2, H330<br>Acute Tox. 3, H311<br>Acute Tox. 2, H300<br>STOT RE 1, H372<br>Aquatic Chronic 1, H410 | 0,4 |
| Isotridecylalcohol-6-ethoxylate | 69011-36-5<br>500-241-6 | Acute Tox. 4, H302<br>Eye Dam. 1, H318 | > 1 – < 3 |
| Propane | 74-98-6<br>200-827-9<br>01-2119486944-21-xxxx | Press. Gas<br>Flam. Gas 1, H220 | > 1 |
| Butane | 106-97-8<br>203-448-7<br>01-2119474691-32-xxxx | Flam. Gas 1, H220<br>Press. Gas | > 1 |
| Glycerine | 56-81-5<br>200-289-5<br>01-2119471987-18-XXXX | Not classified | > 1 |

**Further information**

| | | |
|---|---|---|
| Coumatetralyl | 5836-29-3 | M-Factor: 10 (chronic) |

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. Call a physician or poison control center immediately.

**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:<br>Internal and external bleeding, shock possible<br>Symptoms and hazards refer to effects observed after intake of significant amounts of the active ingredient(s). |

**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** | 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. |
| **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. |
| **6.2 Environmental precautions** | Do not allow to get into surface water, drains and ground water. |

**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. |
| **6.4 Reference to other sections** | Information regarding safe handling, see section 7.<br>Information regarding personal protective equipment, see section 8.<br>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. |
| **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/m3 (TWA) | | OES BCS* |
| Glycerine<br><br>(Mist.) | 56-81-5 | 10 mg/m3 (TWA) | 06 2011 | OEL (BE) |

| | | | | |
|---|---|---|---|---|
| Propane | 74-98-6 | 1.000 ppm (TWA) | 06 2011 | OEL (BE) |
| Butane | 106-97-8 | 1.000 ppm (TWA) | 06 2011 | OEL (BE) |

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

**8.2 Exposure controls**

**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.

**General protective measures**
Technical and organizational protective measures are preferable to use (personal protective equipment must not be a permanent measure).
Chemical protective gloves may only be worn longer than 4 hours in exceptional cases. Already regular wearing of protective gloves > 2 hours (so-called wet work) obliges the employer to send an offer of

occupational health check-ups to the employee.

## 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/cm³ ( 20 °C) |
| **Water solubility** | miscible |
| **Partition coefficient: n-octanol/water** | Coumatetralyl: log Pow: 1,5 (20 °C) (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<br>Acute toxicity estimate<br>Calculation method |
| **Acute inhalation toxicity** | ATE (Mix) (Rat) > 5,0 mg/l<br>Acute toxicity estimate<br>Calculation method |
| **Acute dermal toxicity** | ATE (Mix) (Rat) 5.000 mg/kg<br>Calculation method |
| **Skin corrosion/irritation** | No skin irritation (Rabbit) |

| | |
|---|---|
| | The information is derived from the properties of the individual components. |
| **Serious eye damage/eye irritation** | Irritating to eyes. (Rabbit)<br>The information is derived from the properties of the individual components. |
| **Respiratory or skin sensitisation** | Non-sensitizing. (Guinea pig)<br>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<br>Exposure time: 96 h<br>The value mentioned relates to the active ingredient coumatetralyl. |
| **Chronic toxicity to fish** | Oncorhynchus mykiss (rainbow trout)<br>NOEC: 5 µg/l<br>Exposure time: 21 d<br>The value mentioned relates to the active ingredient. |
| **Toxicity to aquatic invertebrates** | EC50 (Daphnia magna (Water flea)) > 14 mg/l<br>Exposure time: 48 h<br>The value mentioned relates to the active ingredient coumatetralyl. |
| **Chronic toxicity to aquatic invertebrates** | NOEC (Daphnia magna (Water flea)): 0,1 mg/l<br>Exposure time: 21 d<br>The value mentioned relates to the active ingredient. |
| **Toxicity to aquatic plants** | IC50 (Desmodesmus subspicatus (green algae)) > 18 mg/l |

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

**12.2 Persistence and degradability**

| | |
|---|---|
| **Biodegradability** | Coumatetralyl: < 60 %,<br>Not readily biodegradable. |
| **Koc** | Coumatetralyl: Koc: 258 |

**12.3 Bioaccumulative potential**

| | |
|---|---|
| **Bioaccumulation** | Coumatetralyl: Bioconcentration factor (BCF) 11,4<br>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** | 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. |
| **Contaminated packaging** | Ensure aerosol container is empty before disposal.<br>Not completely emptied packagings should be disposed of as hazardous waste.<br>Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. |
| **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 Packaging Group | NOT APPLICABLE. |
| 14.5 Environm. Hazardous Mark | NO |
| Hazard no. | NOT APPLICABLE. |
| Tunnel Code | D |

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 Packaging 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 Packaging 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**

**Further information**

WHO-classification: III (Slightly hazardous)

| | |
|---|---|
| Authorisation No. (Belgium) | BE2014-0020 |
| Registration No. (G.D. Luxembourg) | A0/129/13/L |
| Registration No. (G.D. Luxembourg) | A0/128/13/L |

**Toxicity class (Belgium)** Not classified

**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. |
| H311 | Toxic in contact with skin. |

| | |
|---|---|
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H360D | May damage the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**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 % |
| 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 |
| M | "M" indicates that exposure to a higher concentration than the limit value, irritation appears or an acute hazard exists. The working process should be designed such that exposure never exceeds the limit value. During the measurements, the sampling period should be as short as possible in order to make reliable measurements. The measurements result is calculated based on the sampling period. |
| 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.

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