SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier
Trade name               Racumin® 8 Rat and Mouse Rodenticide
Product code (UVP)        00864870

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 Pty Ltd.
                          ABN 87 000 226 022
                          Level 1, 8 Redfern Road
                          3123 Hawthorn East
                          Victoria
                          Australia
Telephone                (03) 9248 6888
Telefax                  (03) 9248 6800
Responsible Department   1800 804 479 Technical Information Service
Website                  www.environmentalscience.bayer.com.au

1.4 Emergency telephone no.
Emergency telephone no.   1800 033 111 IXOM Operations Pty Ltd

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Australia. GHS Hazardous Chemical Information List
Not classified, the classification criteria are not met.

2.2 Label elements
No hazard label for supply/use required.

2.3 Other hazards
No other hazards known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
Coumatetralyl 8g/kg
Chemical nature   Technical concentrate (TK)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coumatetralyl</td>
<td>5836-29-3</td>
<td>0.80</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>97.80</td>
</tr>
</tbody>
</table>
Other ingredients (non-hazardous) to 100%

SECTION 4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Safety Data Sheet to the doctor.

4.1 Description of first aid measures

Inhalation
Move the victim to fresh air and keep at rest. If symptoms persist, call a physician.

Skin contact
Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water.

Eye contact
Hold eye open and rinse slowly and gently with water for 15-20 minutes.

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

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
Ingestion may provoke the following symptoms:, Blood disorders, Nose bleeding, Gum bleeding, Bloody vomiting, Bruising and haemorrhage formation

4.3 Indication of any immediate medical attention and special treatment needed

Treatment
Treat symptomatically. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. Antidote: Vitamine K1. Cases of severe poisoning may require the usual measures like application of blood products or transfusions.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable
Water spray, Carbon dioxide (CO2), Foam, Sand

5.2 Special hazards arising from the substance or mixture

Accumulation of fine dust may entail the risk of a dust explosion in the presence of air., In the event of fire the following may be released:, Carbon monoxide (CO)

5.3 Advice for firefighters

Special protective equipment for firefighters
Wear self-contained breathing apparatus and protective suit.

Further information
Evacuate personnel to safe areas. Fight fire from upwind position. Whenever possible, contain fire-fighting water by diking area with sand or earth. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Precautions
An emergency shower must be readily accessible to the work area. Use personal protective equipment. Avoid contact with spilled product or contaminated surfaces. Keep people away from and upwind of spill/leak. Do not breathe dust.

6.3 Methods and materials for containment and cleaning up
Methods for cleaning up
Dike area to prevent runoff. Collect and transfer the product into a properly labelled and tightly closed container. Clean with detergents. Avoid solvents.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Hygiene measures
Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers
Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>2.5 mg/m³ (TWA)</td>
<td>12 2011</td>
<td>AU NOEL</td>
</tr>
</tbody>
</table>

8.2 Exposure controls
Personal protective equipment - End user
Hand protection
Elbow-length PVC or nitrile gloves
Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Form
powder
Colour
violet
Bulk density
c.a. 1,000 kg/m³
SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity
Not applicable

10.4 Conditions to avoid
- Exposure to moisture.
- Elevated temperatures

10.5 Incompatible materials
- Strong oxidizing agents

10.6 Hazardous decomposition products
- Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity
LD50 (Rat) > 5,000 mg/kg
Test conducted with a similar formulation.

Acute inhalation toxicity
LC50 (Rat) > 3.3 mg/l
Exposure time: 4 h
Determined in the form of dust.
Highest attainable concentration.
Test conducted with a similar formulation.

Acute dermal toxicity
LD50 (Rat) > 5,000 mg/kg
Test conducted with a similar formulation.

Skin irritation
No skin irritation (Rabbit)
Test conducted with a similar formulation.

Eye irritation
No eye irritation (Rabbit)
Test conducted with a similar formulation.

Sensitisation
Non-sensitizing.
The value mentioned relates to the active ingredient coumatetralyl.

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 did not cause developmental toxicity in rats and rabbits.

Assessment repeated dose toxicity
Coumatetralyl caused inhibition of blood coagulation possibly causing hemorrhagic syndrome in animal studies. The toxic effects of Coumatetralyl are related to antivitamin K properties.
Aspiration hazard
Based on available data, the classification criteria are not met.

Information on likely routes of exposure
Toxic by inhalation.
May cause skin irritation. Harmful if absorbed through skin.
May cause eye irritation. Harmful if swallowed.

Early onset symptoms related to exposure
Refer to Section 4

Delayed health effects from exposure
Refer to Section 11

Exposure levels and health effects
Refer to Section 4

Interactive effects
Not known

When specific chemical data is not available
Not applicable

Mixture of chemicals
Refer to Section 2.1

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicty
Toxicity to fish
LC50 (Oncorhynchus mykiss (rainbow trout)) 53 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient coumatetralyl.

Toxicity to aquatic invertebrates
EC50 (Daphnia magna (Water flea)) > 1,150 mg/l
Exposure time: 48 h
Test conducted with a similar formulation.

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.

Toxicity to other organisms
LD50 (Coturnix japonica (Japanese quail)) > 2000 mg/kg bw
The value mentioned relates to the active ingredient coumatetralyl.

12.2 Persistence and degradability
Biodegradability
Not applicable for this mixture.

12.3 Bioaccumulative potential
Bioaccumulation
Not applicable for this mixture.

12.4 Mobility in soil
Mobility in soil  
Not applicable for this mixture.

12.5 Other adverse effects
Additional ecological information  
No other effects to be mentioned.

SECTION 13. DISPOSAL CONSIDERATIONS
Shake empty container onto baiting site. Do not dispose of undiluted chemicals on-site. Break, crush or puncture and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots.

SECTION 14. TRANSPORT INFORMATION
According to national and international transport regulations not classified as dangerous goods.

SECTION 15. REGULATORY INFORMATION
Registered according to the Agricultural and Veterinary Chemicals Code Act 1994  
Australian Pesticides and Veterinary Medicines Authority approval number: 52182  
SUSMP classification (Poison Schedule)  
Schedule 6 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 16. OTHER INFORMATION
Trademark information  
Racumin® is a registered trademark of the Bayer Group.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

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  
AU OEL Australia. OELs. (Adopted National Exposure Standards for Atmospheric
Contaminants in the Occupational Environment

CAS-Nr. Chemical Abstracts Service number
CEILING Ceiling Limit Value
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
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
OES BCS OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"
PEAK PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.
RID Regulations concerning the International Carriage of Dangerous Goods by Rail
SK-SEN Skin sensitiser
SKIN_DES SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.
STEL STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
TWA TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.
TWA Time weighted average
UN United Nations
WHO World health organisation

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

END OF SDS