SAFETY DATA SHEET

RESOLV SOFT BAIT RODENTICIDE

1 – IDENTIFICATION

1.1 - Product identifier
RESOLV SOFT BAIT RODENTICIDE

1.2 - Other means of identification
APVMA number: 86179

1.3 - Recommended use of the chemical and restrictions on use
Rodenticide - Bait used for the control of rodents.

1.4 - Details of manufacturer or importer

Manufacturer
LIPHATECH S.A.S
Bonnel – CS10005 - 47480 PONT DU CASSE (France)
☎ : +33 5 53 69 35 70 - Fax : + 33 5 53 66 30 65
Department in charge of information: Regulatory Dept.
☎ : +33 5 53 69 81 89 - Fax : + 33 5 53 47 95 01
Email : fds@desangosse.com

Contact details in Australia
De Sangosse Australia Pty Ltd
17/45 Huntley St,
Alexandria NSW 2015 (Australia)
☎ : 1800 782 969 or 02 9519 6360
Email: infoau@desangosse.com

1.5 - Emergency phone number
Australian emergency number 1800 033 111
Poisons Information Centre: 13 11 26

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2 –HAZARD(S) IDENTIFICATION

2.1 – Classification of the hazardous chemical
In accordance with GHS Classification: Classified as hazardous
Classified as hazardous according to the criteria of Safe Work Australia (SWA)
Reproductive toxicity – Category 1B
Acute toxicity (inhalation) – Category 1
Acute toxicity (dermal) – Category 1
Acute toxicity (oral)– Category 1
Specific target organ toxicity (repeated exposure) – Category 1
Hazardous to the aquatic environment (acute) – Category 1
Hazardous to the aquatic environment (chronic) – Category 1

Signal Word:
Danger

Pictograms:

GHS08 (Health Hazard)
GHS06 (Skull and Crossbones)
GHS09 (Environment)

Hazard Statements:
H360D May damage the unborn child
H330 Fatal if inhaled
H310 Fatal in contact with skin
H300 Fatal if swallowed
H372 Causes damage to the blood through prolonged or repeated exposure
H410 Very 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.
P260 Do not breathe dust.
P262 Do not get in eyes, on skin, or on clothing.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment not in line with the label.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 In case of inadequate ventilation, wear respiratory protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE/doctor.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P310 Immediately call a POISON CENTRE/doctor.
P314 Get medical advice/attention if you feel unwell.
P320 Specific treatment is urgent (see First Aid section on the label).
P330 Rinse mouth.
P361+ P364 Take off immediately all contaminated clothing and wash it before reuse.
P391 Collect spillage.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

ADG classification:	Based on available information, not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition
SUSMP classification:	Schedule 6

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3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Rodenticide bait based on Bromadiolone active substance (CAS number: 28772-56-7)
Content of Bromadiolone : 50 mg/kg

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4 – FIRST AID MEASURES

4.1 - Description of necessary first aid measures

GENERAL INFORMATION:
In all cases of suspected exposure, medical assistance should be sought immediately. Show this data sheet. See antidotal therapy below. Note that poisoning symptoms may develop over the course of several days.

EYE CONTACT:
- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Monitor for symptoms described above.

INHALATION:
- The preparation is a non-dusty bait. Inhalation is not applicable as a route of exposure.

SKIN CONTACT:
- Remove contaminated clothing. Launder before re-use.
- Rinse skin immediately with soap and water.
- Monitor for symptoms.

INGESTION:
- Wash out mouth with plenty of water.
- If swallowed, seek medical advice immediately and show the container/label/safety data sheet.
- Do not induce vomiting unless told to do so by the Poison Information Centre (ph. 13 11 26) or doctor.
- Do not give anything by mouth to an unconscious person.

4.2 - Symptoms caused by exposure
Clinical symptoms: nosebleed, gum bleed, spitting blood, multiple or large haematoma, generally sudden appearance of an unusual visceral pain.
Biological symptoms: blood in the urine, increase in coagulation time.

4.3 - Medical attention and special treatment
Primary treatment is antidotal therapy rather than clinical assessment. Antidotal therapy: SPECIFIC vitamin K1 (phytomenadione). Analogues of Vitamin K1 (vitamin K3: menadione for example) are not very active and should not be used. The efficacy of the treatment should be followed by measuring the coagulation time. The treatment should not be discontinued until the coagulation time returns to normal and REMAINS normal. In case of serious intoxication, it may be necessary to administer, in addition to vitamin K1, blood or frozen fresh plasma or PPSB coagulant blood fraction transfusions.

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5 – FIREFIGHTING MEASURES

5.1 - Suitable extinguishing equipment
Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material. Foam or dry chemical fire extinguishing system is preferred to prevent excessive water run off.

5.2 - Specific hazards arising from the chemical
The mixture is not known to produce hazardous decomposition products under normal storage conditions. Normal products of organic combustion will be released under conditions of pyrolysis or combustion.

5.3 - Special protective equipment and precautions for firefighters
Wear breathing apparatus and appropriate protective clothing.

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6 – ACCIDENTAL RELEASE MEASURES

6.1 - Personal precautions, protective equipment and emergency procedures
Operators must observe precautions during handling and storage. See also section 8 of this safety data sheet.

6.2 - Environmental precautions
In case of major spillage in water, prevent entry into drains and waterways. If polluted water reaches drainage systems or water courses, immediately inform the competent authorities.

6.3 - Methods and materials for containment and cleaning up
Collect or sweep up the product into containers for recovery and disposal. After removal, clean contaminated area with water and detergent. Avoid the entry of washings into drains or waterways.
See section 13 concerning disposal methods.

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7 – HANDLING AND STORAGE

7.1 - Precautions for safe handling
Read carefully the label before handling/use.
Protective equipment: see section 8.
Users should wash hands immediately after handling. When using, do not eat, drink or smoke.

7.2 - Conditions for safe storage, including any incompatibilities
Store securely. Store in the original packaging. Keep away from food and out of reach of children.

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8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 – Exposure control measures
Exposure limits are not determined for Bromadiolone active substance.

8.2 - Biological monitoring
No information available.

8.3 - Control banding
No information available.

8.4 - Engineering controls
No information available.

8.5 - Individual protection measures, for example personal protective equipment (PPE)
Operators should be aware that the active substance may cause serious damage to health by prolonged exposure. In case of frequent or prolonged use, monitoring of coagulation time is recommended.

- **EYE AND FACE PROTECTION**:

Eye protection is not necessary if using according to recommendations.

- **SKIN PROTECTION**:

Specific protective clothing or other personal protective equipment is not required if using according to recommendations. It is recommended that operators wear disposable latex or similar gloves. Care should be taken when removing and disposing of gloves. Users should wash hands immediately after handling in all cases.

- **RESPIRATORY PROTECTION**:

Not applicable.

- **THERMAL HAZARDS**:

Not applicable.

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9 – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid paste
COLOUR : Red
ODOUR: Cereals
FLASH POINT: Not applicable to solid substances
FLAMMABILITY: Not highly flammable
OXIDISING PROPERTIES: Not oxidising
EXPLOSIVITY: Does not have explosive potential
WATER SOLUBILITY: Not soluble

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10 – STABILITY AND REACTIVITY

10.1 - Reactivity
The mixture is not known to undergo hazardous reactions under normal handling conditions.

10.2 - Chemical stability
The mixture is stable under normal ambient conditions.

10.3 - Possibility of hazardous reactions
The mixture is not known to undergo hazardous reactions in contact with other substances.

10.4 - Conditions to avoid
None known.

10.5 - Incompatible materials
None known.

10.6 - Hazardous decomposition products
The mixture is not known to produce hazardous decomposition products under normal storage conditions. Normal products of organic combustion will be released under conditions of pyrolysis or combustion.

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11 – TOXICOLOGICAL INFORMATION

11.1 - Information on toxicological effects

ACUTE TOXICITY

Studies conducted on the mixture

LD_{50} oral (Rat): > 5000 mg/kg

LD_{50} dermal (Rabbit): > 2000 mg/kg

LC_{50} Inhalation: Not applicable.

CHRONIC TOXICITY

Studies conducted on active substance Bromadiolone

LOAEL (Dog): 20 µg/kg bw/day

NOAEL (Dog): 8 µg/kg bw/day

The substance is therefore classified as having danger of serious damage to health by prolonged exposure.

SKIN CORROSION/IRRITATION

Not irritant.

SERIOUS EYE DAMAGE/IRRITATION

Not irritant.

RESPIRATORY OR SKIN SENSITISATION

Not sensitising.

GERM CELL MUTAGENICITY

No data available for the mixture.

Active substance Bromadiolone: No in vivo or in vitro evidence of mutagenicity.

CARCINOGENICITY

No data available for the mixture.

Active substance Bromadiolone: No evidence of carcinogenicity.

REPRODUCTIVE TOXICITY

No data available for the mixture.

Active substance Bromadiolone: Reproductive toxicity – Category 1B

SPECIFIC TARGET ORGAN TOXICITY (STOT) – SINGLE EXPOSURE

No data available.

SPECIFIC TARGET ORGAN TOXICITY (STOT) – REPEATED EXPOSURE

No data available for the mixture.

Active substance Bromadiolone: Specific target organ toxicity (repeated exposure) – Category 1.

ASPIRATION HAZARD

No data available.

11.2 - Information on possible routes of exposure

The possible routes of exposure are: oral, dermal, and ocular.

11.3 – Early onset symptoms related to exposure

None. See delayed effects hereunder.

11.4 – Delayed health effects from exposure

Clinical symptoms: nosebleed, gum bleed, spitting blood, multiple or large haematoma, generally sudden appearance of an unusual visceral pain.

Biological symptoms: blood in the urine, increase in coagulation time.

11.5 – Exposure levels and health effects

No data available.

11.6 – Interactive effects

No data available.

12 – ECOLOGICAL INFORMATION

12.1 - Ecotoxicity
Studies conducted on active substance Bromadiolone

AQUATIC ACUTE TOXICITY
LC_{50} Fishes (96 h): > 8 mg/L *(Oncorhynchus mykiss)*
EbC_{50} Algae (72 h): 0.17 mg/L *(Scenedesmus subspicatus)*
EC_{50} Daphnis (48 h): 2 mg/L *(Daphnia magna)*
The substance is very toxic to aquatic organisms.

TOXICITY FOR TERRESTRIAL SPECIES
Acute toxicity LC_{50} Earthworm (14 days) *(Eisenia foetida):* >8.4 mg/kg soil

BIRD TOXICITY
Dietary (5 days): LC_{50}: 62 mg/kg of food (*Colinus virginianus*)
Acute toxicity (5 days): LD_{50}: 138 mg/kg pc (*Colinus virginianus*)

12.2 - Persistence and degradability
The substance is not considered as easily biodegradable.
Aerobic degradation: 0% degradation after 28 days.

12.3 - Bioaccumulative potential
Log Pow: 3.8 – 4.1 (20-25°C) (pH6-7). Bioaccumulative potential.
Bioconcentration factor (BCF): 575

12.4 - Mobility in soil
The substance is considered as having low or no mobility in soil.

12.5 - Other adverse effects
No data available.

13 – DISPOSAL CONSIDERATIONS

13.1 - Disposal methods
Product will be disposed of according to applicable legislation and regulations, if necessary, after consulting an authorised waste disposal company. It is recommended that the waste product is stored in specially designated spaces or destroyed in incineration facilities by the waste disposal companies.
Care should be taken to ensure that disposal methods to not expose the preparation to non-target wild or domestic animals or pets. Dispose of according to national/local law. Do not release into drains or waterways.
Do not contaminate water, food or feed by storage or disposal.
Do not contaminate ground, waterbodies or watercourses with chemicals or used containers. Refer to local waste and environmental regulations.
The empty container should not be used for any other purpose and should be disposed of considering the comments above. Do not reuse or refill the container.

14 – TRANSPORT INFORMATION

Not classified as a dangerous good according to the Australian Dangerous Goods Code for Rail and Road Transport, 7th Edition.

14. 1- UN number
This product is not classified as dangerous goods.

14.2 - Proper shipping name or technical name
This product is not classified as dangerous goods.

14.3 - Transport hazard class
This product is not classified as dangerous goods.

14.4 - Packing group number
This product is not classified as dangerous goods.

14.5 - Environmental hazards for transport purposes
This product is not classified as dangerous goods.

14.6 - Special precautions for user
No special precautions.

14.7 - Additional information
No additional information.

14.8 - Hazchem or emergency action code
Not applicable.

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15 – REGULATORY INFORMATION

15.1 - Safety, health and environmental regulations
SUSMP: Schedule 6
APVMA: Registered according to the Agricultural and Veterinary Chemicals Act 1994.
APVMA Product Number: 86179

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16 – ANY OTHER RELEVANT INFORMATION

Date of preparation of the latest revision
1 June 2023

Revisions
Section 1 - Addition of further information.
Section 2 - Addition of hazard classifications.
All Sections - Minor formatting changes in all sections to comply with the Safe Work Australia Preparation of Safety Data Sheets for Hazardous Chemical Code of Practice July 2020 and GHS7.

Abbreviations:
ADG: Australian Dangerous Goods Code
APVMA: Australian Pesticides and Veterinary Medicines Authority
EC_{50}: Effective concentration 50%
GHS: Global Harmonised System of Classification and Labelling of Chemicals
LC_{50}: Lethal concentration 50%
LD_{50}: Lethal dose 50%
LOAEL: Lowest observable adverse effect level
NOAEL: No observed adverse effect level
SUSMP: Standard for the Uniform Scheduling of Medicines and Poisons

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Information noted in this material safety data sheet is based on our present technical and scientific knowledge of the product at this date.

This information should be used as a guide and does not imply any warranty concerning the specific properties of the product and the specific local needs.

Recipients of this MSDS must ensure that the information it contains has been properly read and understood by all who use, handle, dispose of or in contact with the product.

Our local licensee, liable for the local distribution of the product, will adapt this safety data sheet to the local regulation.