SAFETY DATA SHEET

according to Regulation (EC) No 1272/2008 (CLP)

Bromadiolone 0.005% Bait (RB)

Shanghai Bosman Industrial Co., Limited

Product name	**Bromadiolone 0.005% Bait (RB)**	**SDS number**	**BM-SDS-9036**
Version	**1.0**	**Revision date**	**23 November 2026**
Supersedes	**MSDS Bromadiolone 0.005% RB v1.0 (1 June 2023)**	**Print date**	**23 November 2026**
Language	**EN**	**Format**	**GHS / CLP - 16 sections**

Signed off - QC / regulatory review completed 23 November 2026; document issued for use. This status covers document release only; technical items marked OPEN below remain open. This product is a formulated MIXTURE at 0.005 % active content. Values tagged TEST are batch MEASUREMENTS from the supplied factory inspection report (batch 2026-11-15), not product guarantees. Values tagged ECHA / WHO-FAO / IPCS / EPA / PPDB / GESTIS describe the ACTIVE SUBSTANCE bromadiolone, not the bait batch. The CLP classification of the mixture itself is OPEN (see §2.1); values tagged SDS-2023 come from our superseded 2023 MSDS and are shown for continuity. Items marked OPEN are not estimated.

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

1.1 Product identifier

Trade name	Bromadiolone 0.005% Bait (RB) [SDS-2023/TEST]
Product type / formulation	Ready-to-use (RB) rodenticide bait - formulated mixture [SDS-2023/TEST]
Active substance	Bromadiolone; CAS 28772-56-7; EC 249-205-9; CLP Index 607-716-00-8; CIPAC 371; EPA pesticide code 112001 [ECHA/WHO-FAO/PPDB]
Active content	0.005 % w/w (nominal; standard tolerance 0.005 +- 0.0012 %) [TEST/SDS-2023]

1.2 Relevant identified uses and uses advised against

Identified use	Ready-to-use rodenticide bait for the control of rats and mice, including strains resistant to first-generation anticoagulants; use per the approved national label [WHO/FAO/IPCS/OPEN].
Uses advised against	Any use other than the identified use; domestic use by non-professionals is restricted in the EU (ECHA/BPC/475/2025) - confirm per destination [ECHA/OPEN]. [SDS-2023/ECHA]

1.3 Details of the supplier of the safety data sheet

Supplier	Shanghai Bosman Industrial Co., Limited (上海晓博国际贸易有限公司) [SDS-2023]
Address	No. 1611, North Sichuan Road, Hongkou District, Shanghai 200080, P.R. China [SDS-2023/SDS-TC]
Telephone	+86 21 6306 5878 [SDS-2023]
Fax	+86 21 6306 5878 [SDS-2023]
E-mail	info@bosmangroup.com [SDS-TC]
Website	www.bosmangroup.com [SDS-TC]

1.4 Emergency telephone number

Emergency	+86 21 6356 6528 (24 h) [SDS-TC]

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

THREE CLASSIFICATION LAYERS ARE SHOWN OPENLY: (1) ACTIVE SUBSTANCE [ECHA]: CLP Annex VI harmonised classification of bromadiolone (Index 607-716-00-8): Acute Tox. 1/2 oral, dermal and inhalation (H300/H310/H330), Repr. 1A/1B (H360D), STOT RE 1 (H372), Aquatic Acute 1 (H400) and Aquatic Chronic 1 (H410); GHS06/08/09, signal word DANGER. (2) MIXTURE (this 0.005% bait) [OPEN]: classification of the formulated bait as a mixture requires calculation under CLP Annex I (concentration limits, ATE of the mixture, specific concentration limits) and label sign-off; NOT determined in the supplied documents - not estimated here. (3) LEGACY [SDS-2023]: our 2023 SDS concluded 'Not classified as hazardous due to low concentrations of bromadiolone present in the formulation which acts as a deterrent to humans' and warns that prolonged/repeated exposure to small amounts can produce cumulative toxicity. The three layers conflict; the mixture classification and label elements require CLP Annex I calculation and regulatory sign-off before commercial issue. Pictograms and the signal word shown in §2.2 belong to the ACTIVE SUBSTANCE layer.

Active-substance classification according to Regulation (EC) No 1272/2008 (CLP), Annex VI harmonised entry for bromadiolone [ECHA]. Signal word (a.i.): DANGER.

H-code	Hazard statement (active substance) [ECHA]
H300	Acute toxicity, oral, Category 1 or 2 - Fatal if swallowed.
H310	Acute toxicity, dermal, Category 1 or 2 - Fatal in contact with skin.

H-code	Hazard statement (active substance) [ECHA]
H330	Acute toxicity, inhalation, Category 1 or 2 - Fatal if inhaled.
H360D	Reproductive toxicity, Category 1A or 1B - May damage the unborn child.
H372	Specific target organ toxicity, repeated exposure, Category 1 - Causes damage to organs through prolonged or repeated exposure.
H400	Hazardous to the aquatic environment, acute, Category 1 - Very toxic to aquatic life.
H410	Hazardous to the aquatic environment, chronic, Category 1 - Very toxic to aquatic life with long lasting effects.

2.2 Label elements



SIGNAL WORD - ACTIVE SUBSTANCE (see 2.1)

DANGER

Pictograms: official UN GHS symbols (red diamond / white field / black symbol), UNECE GHS standard as distributed by PubChem (NIH) and held in our GHS asset library. Shown pictograms and the signal word belong to the ACTIVE-SUBSTANCE layer of the classification (CLP Annex VI harmonised entry for bromadiolone, Index 607-716-00-8) [ECHA]. GHS06 (Acute Tox. 1/2, H300/H310/H330), GHS08 (Repr. 1A/1B H360D; STOT RE 1 H372), GHS09 (Aquatic Acute/Chronic 1). Mixture label elements for this 0.005% bait: OPEN - pending CLP Annex I calculation and regulatory sign-off (see §2.1).

Mixture label elements (hazard statements, signal word, pictograms) for this 0.005 % bait: OPEN - pending CLP Annex I calculation and label sign-off. The legacy 2023 SDS carried no GHS label elements for the bait ('not classified as hazardous due to low concentrations') [SDS-2023/OPEN].

Hazard statements (a.i.)	Wording
H300	Acute toxicity, oral, Category 1 or 2 - Fatal if swallowed.
H310	Acute toxicity, dermal, Category 1 or 2 - Fatal in contact with skin.
H330	Acute toxicity, inhalation, Category 1 or 2 - Fatal if inhaled.
H360D	Reproductive toxicity, Category 1A or 1B - May damage the unborn child.
H372	Specific target organ toxicity, repeated exposure, Category 1 - Causes damage to organs through prolonged or repeated exposure.
H400	Hazardous to the aquatic environment, acute, Category 1 - Very toxic to aquatic life.
H410	Hazardous to the aquatic environment, chronic, Category 1 - Very toxic to aquatic life with long lasting effects.

Precautionary statements - Prevention (a.i. layer)

Code	Statement
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust, fume or mist.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash hands, face and exposed skin 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.
P280	Wear protective gloves, protective clothing, eye protection and face protection.

Precautionary statements - Response (a.i. layer)

Code	Statement
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P308+P318	IF exposed or concerned: Immediately call a POISON CENTER/doctor.
P310	Immediately call a POISON CENTER/doctor.
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see Section 4.3 - vitamin K1).
P320	Specific urgent treatment (see Section 4.3 - vitamin K1).
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

Precautionary statements - Storage (a.i. layer)

Code	Statement
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Precautionary statements - Disposal (a.i. layer)

Code	Statement
P501	Dispose of contents and container to a licensed waste contractor per local/regional/national/international regulation.

Precautionary statements above are those of our 95 % TC active-substance SDS (BM-SDS-9035) reproduced at the active-substance layer; the bait label wording must be confirmed after mixture classification and from the approved national label [SDS-TC/OPEN].

2.3 Other hazards

Anticoagulant (vitamin K antagonist) mode of action: cumulative toxicity on prolonged/repeated exposure [SDS-2023/IPCS]. Secondary poisoning risk to predators and scavengers feeding on poisoned rodents [IPCS/WHO-FAO]. Very toxic to aquatic life at active-substance level (H400/H410) [ECHA]. Endocrine-disrupting properties: no conclusion located in consulted public sources [OPEN]. EU non-professional-use restrictions under evaluation - see §15 [ECHA].

3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable - this product is a formulated mixture (ready-to-use bait).

3.2 Mixtures

Formulation type: RB (ready for use). Active ingredient: bromadiolone at 0.005 % w/w [SDS-2023]; measured 0.0052 % w/w, batch 2026-11-15 [TEST].

Component	CAS No.	EC No.	Index No.	Concentration	Classification (CLP)
Bromadiolone	28772-56-7	249-205-9	607-716-00-8	0.005 % w/w (measured 0.0052 %, batch 2026-11-15) [TEST]	A.i. harmonised: Acute Tox. 1/2 (H300/H310/H330), Repr. 1A/1B (H360D), STOT RE 1 (H372), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410) [ECHA]; classification of the mixture: OPEN
Other ingredients	Not stated [OPEN]	-	-	Balance to 100 %; determined not to be hazardous [SDS-2023]	Not classified [SDS-2023]

Factory inspection report covers assay, pH and moisture only; full impurity profile not available [OPEN]. EU dossier records no declared relevant impurities for the active substance; this does NOT characterise the impurity profile of the bait [PPDB/OPEN]. The inspection report is printed with the Chinese product name 溴鼠灵 while the folder and our product record identify the product as 溴敌隆 (bromadiolone). The report is recorded as a 0.005 % bromadiolone bait report per folder context; the Chinese name discrepancy is flagged for correction and regulatory sign-off at source [TEST].

4 FIRST AID MEASURES

4.1 Description of first aid measures

General advice	This material may reduce the clotting ability of the blood and cause bleeding. Have the product label with you when obtaining treatment advice. Never give anything by mouth to an unconscious person. [SDS-2023]
If swallowed	Call a poison control centre or doctor. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control centre or doctor. [SDS-2023]
If inhaled	Move person to fresh air. If not breathing, call an ambulance, then give artificial respiration and call a poison control centre or doctor. [SDS-2023]
If in eyes	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. Call a poison control centre or doctor. [SDS-2023]
If on skin or clothing	Take off contaminated clothing. Rinse skin with plenty of cool water for 15-20 minutes. Call a poison control centre or doctor. [SDS-2023]

4.2 Most important symptoms and effects, acute and delayed

Anticoagulant poisoning: lethargy, loss of appetite, reduced clotting ability of blood, increased tendency to bleed, bruising, nose and gum bleeds, pallor, blood in urine and faeces, haemorrhage into and around joints; nausea and vomiting may occur soon after ingestion but several hours/days may elapse before typical features appear [SDS-2023]. Eye contact: mild, transient irritant [SDS-2023].

4.3 Indication of any immediate medical attention and special treatment needed

Note to physician or veterinarian: contains an anticoagulant ingredient. For humans or animals ingesting bait and/or showing obvious poisoning symptoms (bleeding or prolonged prothrombin times), give Vitamin K1 (phytomenadione) intramuscularly or orally. In severe cases, blood transfusions may be needed. Prothrombin time guides therapy. [SDS-2023/IPCS]

5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable media	Use media suitable for the surrounding fire. [SDS-2023]
Unsuitable media	None known. [SDS-2023/OPEN]

5.2 Special hazards arising from the substance or mixture

The product decomposes in a fire to emit toxic fumes; oxides of carbon [SDS-2023]; combustion of the active substance may also release nitrogen oxides and hydrogen bromide [SDS-TC]. No specific fire or explosion hazards known [SDS-2023].

5.3 Advice for firefighters

Wear self-contained breathing apparatus (full facepiece) and full protective clothing. Contain run-off to prevent pollution. [SDS-2023]

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wearing PPE as specified in Section 8, isolate and contain the spill. Limit access to the spill area to necessary personnel. Do not allow spilled material to enter sewers, streams or other waters. [SDS-2023]

6.2 Environmental precautions

Toxic to aquatic organisms, fish and wildlife at active-substance level (H400/H410) [ECHA/SDS-2023]. Do not allow entry to drains, sewers or watercourses. [SDS-2023/ECHA]

6.3 Methods and material for containment and cleaning up

Scoop up spilled material and place in a closed, labelled container for use according to label instructions or disposal. [SDS-2023]

6.4 Reference to other sections

See Section 8 for personal protection and Section 13 for disposal. [SDS-2023]

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

- Clean protective clothing, used protective clothing and worker's personal clothing should be kept apart; at the end of each day all protective clothing should be decontaminated, washed, rinsed and dried. Extra care when cleaning equipment after use. Wear rubber gloves and wash hands after handling. Avoid all contact by mouth. Prevent contamination of food, feed, eating utensils and all sources of drinking water, rivers, dams, crops or grazing. Toxic to aquatic organisms, fish and wildlife. Bury all dead rodents and any bait not consumed at end of treatment [SDS-2023].

7.2 Conditions for safe storage, including any incompatibilities

- Store in the original container in a cool, dry area out of reach of children, pets and domestic animals. Do not contaminate water, food or feed. Keep container tightly closed. Do not remove or destroy the product label [SDS-2023].

7.3 Specific end use(s)

Ready-to-use rodenticide bait for the control of rats and mice, including strains resistant to first-generation anticoagulants; use per the approved national label [WHO/FAO/IPCS/OPEN].

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Component	Limit value	Basis
Bromadiolone (active substance)	No OEL / DNEL established in the consulted public sources	WHO-FAO/PPDB/OPEN
Bromadiolone 0.005% bait	Established exposure limits: not applicable [SDS-2023]	SDS-2023

8.2 Exposure controls

Appropriate engineering controls: special ventilation is not required for the normal handling and use of this product when following label instructions [SDS-2023].

Protective equipment	Requirement
Individual protection	Wear long pants, shoes, socks and waterproof gloves when handling this product. Follow manufacturer's instructions for cleaning/maintaining PPE, or else wash with detergent and hot water. [SDS-2023]
Clothing hygiene	Keep and wash PPE separately from other laundry. Remove PPE immediately after handling. Wash the outside of gloves before removing. [SDS-2023]
Hygiene	Wash hands thoroughly after applying bait and before eating, drinking, chewing gum, using tobacco or using the toilet, and change into clean clothing. [SDS-2023]

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Property	Value
Physical state	Solid - formulated bait (granule / block) [SDS-2023/DG-CLASS-NEW]
Appearance / colour	Pink columnar granule, weak odour [DG-CLASS-NEW]; 2021 certificate: Red granule, weak odour [DG-CLASS-OLD, 2021, expired] (see note)
Odour	Weak odour [SDS-2023/DG-CLASS-NEW/DG-CLASS-OLD]
pH	pH 4.0 - 8.0 (standard); measured 7.1 (batch 2026-11-15) [TEST]
Moisture / water content	<= 9.0 % (standard); measured 6.8 % (batch 2026-11-15) [TEST]
Melting point	No distinct melting point for the bait formulation [SDS-2023]; active substance: 200 - 210 C (mixture of two diastereoisomers); PPDB A5 lists 199 C [WHO/FAO/PPDB]
Boiling point	Decomposes before boiling [PPDB] (active substance)
Flash point	218 C (active substance) [PPDB] (active substance); not flammable (bait) [SDS-2023]
Flammability	Not flammable [SDS-2023]
Density	1.45 g/cm3 at 20.5 C (active substance) [GESTIS] (active substance)

Property	Value
Vapour pressure	0.002 mPa at 20 C (IPCS: 2 x 10-6 Pa); PPDB A5: 2.13 x 10-5 mPa [IPCS/PPDB] (active substance)
Water solubility	Active substance: water 19 mg/L at 20 C (PPDB A5: 18.4 mg/L at pH 7); ethanol 8.2 g/L; acetone 10 g/L; ethyl acetate 25 g/L; dimethylformamide 730 - 750 g/L [PPDB]. Legacy SDS wording: soluble in chloroform, slightly soluble in acetone, benzene, ethanol, acetic acid, glycerin, polyethylene glycol; insoluble in water and petroleum ether [SDS-2023].
Partition coefficient (log Kow)	log Pow about 4.07 (P = 1.17 x 10E4 at pH 7 / 20 C, calculated) [WHO/FAO/PPDB] (active substance)
Auto-ignition temperature	Not stated [OPEN]
Decomposition temperature	Thermally stable below 200 C; decomposes before boiling [PPDB] (active substance)
Explosive properties	None [SDS-2023]
Oxidising properties	Not stated [OPEN]

Appearance conflict shown side by side: the 2026 appraisal certificate describes pink columnar granules, the 2021 certificate red granules, and the legacy SDS only 'solid, weak odour'. Current production appearance is taken as the 2026 certificate value; confirm against the current sales specification and photograph before issue [DG-CLASS-NEW/DG-CLASS-OLD/OPEN]. A colour photograph in the folder (blue-green wax pills) does not match either certificate and is NOT used as appearance evidence.

9.2 Other information

Bait-level values (pH, moisture, appearance, odour) come from the factory inspection report and the transport appraisal certificates. The remaining values describe the ACTIVE SUBSTANCE (typically 97% technical material or an EU dossier substance); they are contextual reference only, NOT measurements of the bait batch and not specification guarantees.

10 STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive; not sensitive to shock or static discharge; no hazardous reactions known [SDS-2023]. [SDS-2023]

10.2 Chemical stability

Stable under recommended storage and handling conditions [SDS-2023/SDS-TC].

10.3 Possibility of hazardous reactions

None known under normal conditions of use. [SDS-2023]

10.4 Conditions to avoid

None stated by the legacy SDS [SDS-2023]; for the active substance, heat above 200 C and direct sunlight [SDS-TC/PPDB].

10.5 Incompatible materials

None stated by the legacy SDS [SDS-2023]; for the active substance, strong oxidising agents, strong acids and bases [SDS-TC]. Keep away from food, feed and drinking water.

10.6 Hazardous decomposition products

Decomposes in a fire to emit toxic fumes; oxides of carbon [SDS-2023]; combustion may also form nitrogen oxides and hydrogen bromide where the molecule contains bromine [SDS-TC].

11 TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes (Regulation (EC) No 1272/2008)

Likely routes of exposure: ingestion, skin absorption [SDS-2023].

Formulation-level (bait) values [SDS-2023]

Endpoint	Result (legacy SDS, formulation level)	Source
Acute oral LD50 - rat (formulation)	> 5000 mg/kg [SDS-2023]	SDS-2023
Acute inhalation LC50 - rat, 4 h (formulation)	8.6 mg/L (extrapolated) [SDS-2023]	SDS-2023
Acute dermal LD50 - rabbit (formulation)	> 5000 mg/kg [SDS-2023]	SDS-2023
Skin irritation / sensitisation	Non-irritating; not a skin sensitiser [SDS-2023]	SDS-2023
Eye irritation	Mild, transient irritant [SDS-2023]	SDS-2023
Carcinogenicity	No ingredient listed by NTP, IARC or OSHA [SDS-2023]	SDS-2023

Public-authority toxicology - ACTIVE SUBSTANCE, not our bait batch

Endpoint	Public value / study basis	Source
Acute oral LD50 - rat	0.56 - 0.84 mg/kg (concentrate, EPA Toxicity Category I); PPDB A5: > 0.56 mg/kg	EPA/PPDB
Acute dermal LD50 - rabbit	1.71 mg/kg (EPA Category I); IPCS reports 9.4 mg/kg in another study	EPA/IPCS
Acute inhalation LC50 - rat	0.43 ug/L (EPA Toxicity Category I)	EPA
Eye / skin effects (a.i.)	Rabbit eye irritation cleared within 4 days (Cat III); dermal minimally irritating (Cat IV); not a dermal sensitiser	EPA
Short-term oral NOAEL	0.008 mg/kg bw/day, dog, 90-day study (A5)	PPDB
Long-term oral NOAEL	0.004 mg/kg bw/day, rat, 90-day study (A4)	PPDB

Endpoint	Public value / study basis	Source
ADI / ARfD	None allocated (A5)	PPDB
WHO hazard classification	Class Ia - extremely hazardous (active substance)	PPDB
Mode of action	Second-generation anticoagulant (vitamin K antagonist); inhibits vitamin K 2,3-epoxide reductase, disrupting prothrombin synthesis	IPCS/WHO-FAO
Antidote / medical guidance	Vitamin K1 (phytomenadione) intramuscularly or orally for ingesting bait / obvious poisoning symptoms (bleeding or prolonged prothrombin times); in severe cases blood transfusions may be needed; prothrombin time guides therapy	SDS-2023/IPCS

Formulation-level values above are quoted from our legacy 2023 SDS and are not accompanied by study reports; they are shown for continuity and remain subject to verification [SDS-2023/OPEN]. Public-authority endpoints below describe the ACTIVE SUBSTANCE (US EPA 1998 RED, WHO/FAO, IPCS, PPDB), not the bait batch.

11.2 Symptoms and effects

Anticoagulant poisoning: lethargy, loss of appetite, reduced clotting ability of blood, increased tendency to bleed, bruising, nose and gum bleeds, pallor, blood in urine and faeces, haemorrhage into and around joints; nausea and vomiting may occur soon after ingestion but several hours/days may elapse before typical features appear [SDS-2023]. Eye contact: mild, transient irritant [SDS-2023].

11.3 Other information

Active-substance classification per CLP Annex VI (§2.1). The mixture classification remains OPEN pending CLP Annex I calculation [OPEN].

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Formulation-level (bait) values [SDS-2023]

Organism / endpoint	Result (legacy SDS, formulation calculated)	Source
Fish, 96 h LC50 (formulation, calculated)	Rainbow trout 28000 mg/L; bluegill sunfish 60000 mg/L [SDS-2023]	SDS-2023
Daphnia, 48 h EC50 (formulation, calculated)	40000 mg/L [SDS-2023]	SDS-2023
Algae, 72 h EC50 growth (formulation, calculated)	340 mg/L [SDS-2023]	SDS-2023

Public-authority ecotoxicology - ACTIVE SUBSTANCE, not our bait batch

Organism / endpoint	Public value / study basis	Source
Fish, acute 96 h LC50 (a.i.)	Rainbow trout (Oncorhynchus mykiss) > 8.0 mg/L (A5); IPCS cites 1.4 to > 3 mg/L for other species	PPDB/IPCS
Aquatic invertebrates, 48 h EC50 (a.i.)	Daphnia magna 2 mg/L (A5)	PPDB
Algae, 96 h EbC50 (biomass, a.i.)	Desmodesmus subspicatus 0.017 mg/L (A4)	PPDB
Earthworms, acute 14 d LC50 (a.i.)	> 4.74 mg/kg dry soil (A5)	PPDB
Birds, acute oral LD50 (a.i.)	Northern bobwhite (Colinus virginianus) 138 mg/kg (A5); secondary-poisoning concern for predators	PPDB

Formulation-level (bait) aquatic values above are quoted from our legacy 2023 SDS as 'formulation calculated'; the units are reproduced verbatim and remain subject to verification [SDS-2023/OPEN]. Public-authority endpoints below describe the ACTIVE SUBSTANCE (AERU PPDB, WHO/FAO, IPCS), not the bait batch.

12.2 Persistence and degradability

Bio-accumulation: potential moderate; log Pow 4.07 [SDS-2023/WHO-FAO]. Biodegradability: slowly degraded in soil [SDS-2023]. Mobility: relatively immobile in soil [SDS-2023]. Ground or surface water: unlikely to be a source of contamination [SDS-2023]. [SDS-2023]

Soil persistence conflict shown side by side: legacy SDS gives soil DT50 aerobic 53 days / anaerobic 60 days [SDS-2023]; AERU PPDB cites soil DT50 (field) 4.6 days (EPA databases) and IPCS 1.8 - 7.4 days under other conditions [PPDB/IPCS]. Not adjudicated here; both are active-substance-level contextual values.

12.3 Bioaccumulative potential

Potential moderate (legacy SDS); active-substance log Pow about 4.07 [WHO-FAO/PPDB]. [SDS-2023/WHO-FAO]

12.4 Mobility in soil

Relatively immobile in soil [SDS-2023].

12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB under REACH on the basis of available data (SDS-TC §12.5) [SDS-TC/OPEN].

12.6 Endocrine disrupting properties

No endocrine-disrupting properties identified per Delegated Regulation (EU) 2017/2100 in our 95% TC SDS; no bait-specific conclusion located [SDS-TC/OPEN].

12.7 Other adverse effects

Secondary poisoning: predators and scavengers feeding on poisoned rodents are at risk [IPCS]. Ground or surface water: unlikely to be a source of contamination [SDS-2023].

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Residue may be disposed of in accordance with local/national regulations. [SDS-2023]

- Empty containers to be disposed of in a responsible manner. Do not re-use for any other purpose. [SDS-2023]
- Bury all dead rodents and any bait not consumed at end of treatment, to prevent secondary poisoning of wildlife and domestic animals. [SDS-2023/IPCS]
- Prevent contamination of ponds, watercourses or ditches with the product or empty container. [SDS-2023]

14 TRANSPORT INFORMATION

Parameter	ADR / RID	IMDG (sea)	IATA (air)
UN number / class / PG	Not regulated [SDS-2023/OPEN]	None - not subject to IMDG Code [DG-CLASS-NEW]	Not regulated [SDS-2023/OPEN]
Proper shipping name	Not regulated [SDS-2023]	Non-restricted goods (0.005% bromadiolone bait) [DG-CLASS-NEW]	Not regulated [SDS-2023]
Marine pollutant	-	No - none of the seven danger items applies; class None, packing category None [DG-CLASS-NEW]	-
Transport label	None [SDS-2023]	None [DG-CLASS-NEW]	None [SDS-2023]
Special precautions	Confirm destination rules [OPEN]	Confirm against current certificate & flag-state requirements [OPEN]	Confirm [OPEN]

Apparent contrast to record openly: the ACTIVE SUBSTANCE carries CLP acute-toxicity and aquatic classifications (§2/§3), yet the 0.005% bait was appraised by the competent testing institution as non-restricted goods under the IMDG Code (2024 edition), consistent with the bait's very low active content and the legacy SDS conclusion. This appraisal is a competent-authority document for the actual article; it is not a CLP mixture classification (§2 layer 2 remains OPEN). Sea transport basis: IMDG Code 2024 edition [DG-CLASS-NEW]; the 2021 document (IMDG 2020 edition, dated 3 Dec 2021) is EXPIRED and cited as historical corroboration only [DG-CLASS-OLD]. Third-party applicant/manufacturer names and the testing-institution trade names are withheld per our desensitisation rule; certificate numbers are retained.

14.6 Special precautions for user

Do not transport together with foodstuffs, feed or drinking water. Keep containers upright, secured and clearly labelled. [SDS-2023]

14.7 Transport in bulk (MARPOL Annex II / IBC Code)

Not applicable - the product is transported in packaged form only. [SDS-2023]

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the mixture

- Regulation (EC) No 1272/2008 (CLP): bromadiolone listed in Annex VI, Index 607-716-00-8 (active-substance harmonised classification, §2.1); classification of this 0.005 % bait mixture remains OPEN pending Annex I calculation [ECHA/OPEN].
- Regulation (EC) No 528/2012 (BPR): bromadiolone approved for product type 14 (rodenticides); approval expiry postponed to 31 December 2026 by Commission Implementing Decision (EU) 2024/734; renewal under evaluation; candidate for substitution [EU/ECHA].
- ECHA BPC opinion ECHA/BPC/475/2025 (adopted 14 May 2025): renewal proposed only under BPR Art. 5(2) derogations; non-professional mouse use and professional permanent baiting not supported [ECHA].
- WHO hazard classification: Class Ia (active substance) [PPDB].
- Not approved as a plant-protection active substance under Regulation (EC) 1107/2009 (EU) / GB retained equivalent [PPDB].
- National rodenticide registration certificate and approved label for the destination market required [OPEN].

15.2 Chemical safety assessment

A chemical safety assessment for the mixture has not been carried out / not located [OPEN]. For the active substance, substance-level evaluations exist in the EU BPR process [ECHA/OPEN].

16 OTHER INFORMATION

16.1 Revision information

Version 1.0 (23 November 2026): first issue in the standard Bosman GHS/CLP 16-section format; supersedes the 2023 MSDS 'Bromadiolone 0.005% RB' v1.0. Batch data come from the supplied factory inspection report (batch 2026-11-15, standard Q/AKSK 70-2026, third-party issuer anonymised); transport status from the 2026 transport-conditions appraisal certificate No. 202600925401344 (IMDG 2024) with the expired 2021 certificate No. 202200204424858 (IMDG 2020) as historical corroboration; missing fields are supplemented from WHO/FAO DS No.88, IPCS HSG 94, ECHA BPC opinion, Decision (EU) 2024/734, US EPA 1998 RED, AERU PPDB and GESTIS at active-substance level with source tags. GHS pictograms are official UN symbols (GHS06/GHS08/GHS09) at the active-substance layer [ECHA]. The mixture CLP classification is OPEN; conflicting legacy statements and certificate appearance descriptions are shown side by side, not adjudicated.

16.2 Full text of hazard statements in Sections 2 and 3 (active substance)

Code	Full text
H300	Acute toxicity, oral, Category 1 or 2 - Fatal if swallowed.
H310	Acute toxicity, dermal, Category 1 or 2 - Fatal in contact with skin.
H330	Acute toxicity, inhalation, Category 1 or 2 - Fatal if inhaled.
H360D	Reproductive toxicity, Category 1A or 1B - May damage the unborn child.
H372	Specific target organ toxicity, repeated exposure, Category 1 - Causes damage to organs through prolonged or repeated exposure.
H400	Hazardous to the aquatic environment, acute, Category 1 - Very toxic to aquatic life.
H410	Hazardous to the aquatic environment, chronic, Category 1 - Very toxic to aquatic life with long lasting effects.

16.3 Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. BPR: Biocidal Products Regulation (EU) No 528/2012. CAS: Chemical Abstracts Service. CLP: Classification, Labelling and Packaging (Regulation (EC) No 1272/2008). ECHA: European Chemicals Agency. EC50: half maximal effective concentration. GESTIS: information system of the German statutory accident insurance. GHS: Globally Harmonised System. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods Code. IPCS: International Programme on Chemical Safety. LC50/LD50: lethal concentration/dose, 50 %. NOAEL: no observed adverse effect level. OEL: occupational exposure limit. PBT: persistent, bioaccumulative and toxic. PPDB: Pesticide Properties DataBase (AERU). RB: ready-to-use bait. STOT: specific target organ toxicity. vPvB: very persistent and very bioaccumulative.

16.4 Training advice

Users must be trained in safe handling, PPE use, bait-application practice and the first-aid measures in Section 4. [SDS-2023]

16.5 Disclaimer

The information in this safety data sheet is based on the present state of knowledge and current legislation at the date of revision. It describes the product with regard to safety requirements and does not constitute a guarantee of any specific property. Factory-inspection values are batch measurements; public-authority values are active-substance-level reference only, not batch measurements or product guarantees. The mixture CLP classification, bait label elements, transport status for road/air modes and national registration remain OPEN and require determination and sign-off. Document QC / regulatory review completed and signed off 23 November 2026; the OPEN items above are not closed by this sign-off. (c) Shanghai Bosman Industrial Co., Limited (上海晓博国际贸易有限公司). All rights reserved.