Sakarat Bromabait Safety Data Sheet

Labelling according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019
Control of Substances Hazardous to Health Regulations 2002 (as amended). The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Sakarat Bromabait (GB-2015-0931, NI-2015-0931)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: A cereal-based rodenticide for use on rats and mice in and around buildings, and for rats only, in outdoor open areas and waste dumps.
Uses advised against: Not to be used for pulsed baiting.

1.3. Details of the supplier of the safety data sheet

Address: Killgerm Chemicals Ltd, Wakefield Road, Ossett, WF5 9AJ

Tel: +44 (0)1924 268 450 **Fax:** +44 (0)1924 265 033 **Email:** technical@killgerm.com

1.4. Emergency telephone number

Medical professionals should use National Poisons Information Service Tel: 0870 600 6266.
Killgerm Chemicals Ltd Tel:01924 268452 (Office hours) Emergency Line 01865407333
Non-medical professionals should seek information by contacting NHS by dialling 111.

SECTION 2: Hazards identification

2.1. Classification of the mixture according to Regulation (EC) No. 1272/2008 [CLP]

Repro tox cat 1B:	H360D	May Damage fertility or the unborn child.
STOT RE cat 1:	H372	Causes damage to organs through prolonged or repeated exposure

2.2. Label elements

GHS08
Signal Word: **DANGER**

Hazard statements:

H360D: May Damage the unborn child.
H372: Causes damage to organs through prolonged or repeated exposure.

Precautionary statements:

P201: Obtain special instructions before use.
P202: Do Not handle until all safety precautions have been read and understood.
P260: Do not breath dust.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink, or smoke when using this product.
P280: Wear protective gloves and clothing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P314: Get medical advice/attention if you feel unwell.
P405: Store locked up: store in a closed container.
P501: Dispose of contents/container to point authorised to receive hazardous waste.

Contains:

Bromadiolone

Active Substances:

Sodium Benzoate, 0.5%

Bromadiolone, 0.005%

To avoid risk to man and to the environment comply with the instructions for use. Safety data sheet available for professional user on request.

2.3. Other hazards

This product contains Bromadiolone, an indirect anticoagulant. Any signs of poisoning are unlikely to occur until 12-18 hours after ingestion. Thereafter, they will develop progressively and may rapidly appear. See Section 4.2. for detailed information about the important symptoms of exposure.

The mixture contains PBT substances in a concentration lower than 0.1%

The mixture does not contain substances classified as vPvB.

The mixture does not contain any endocrine disrupting properties substances.

The product may have the following additional risks:

May form explosible dust-air mixture if dispersed.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous Components in Product

Ingredient Name	Concentration	Classification	Specifics concentration limits and Acute toxicity estimate
Bromadiolone Technical Material CAS No: 28772-56-7 EC No: 249-205-9	0.005 – 0.25%	Acute Tox. 1, H310 – Acute Tox. 1, H330 – Acute Tox. 1, H300 – Aquatic Acute 1, H400 (M=1) – Aquatic Chronic 1, H410 (M=1) – Repr. 1B, H360D – STOT RE 1, H372	Repr. 1B, H360D: C ≥ 0.003% STOT RE 2, H373: 0.0005% < C < 0.005% STOT RE 1, H372: C ≥ 0.005
[2] 2,6-di-tert-butyl-p-cresol CAS No: 128-37-0 EC No: 204-881-4	0 – 0.25%	Aquatic Acute 1, H400 – Aquatic Chronic 1, H410	-
Denatonium Benzoate CAS No: 3734-33-6 EC No: 223-095-6	0.001%	Acute Toxic Cat. 4 (Oral, Inhalation) Skin irritation Cat. 2 Eye irritation Cat. 2 Aquatic Chronic Cat. 3	

See section 16 for full text of H phrases and hazard classification of ingredients.

[2] Substance with a national workplace exposure limit (see section 8.1)

SECTION 4: First aid measures

4.1. Description of first aid measures

General: If during or after use/exposure you begin to feel unwell, seek medical attention bringing a copy of the product label/the SDS.

Eye contact: Flush with clean water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, seek medical advice.

Skin contact: Remove contaminated clothing. Wash skin vigorously with soap and water. NEVER use solvents or thinners.

Ingestion: DO NOT induce vomiting. Rinse mouth carefully with water. Never give anything by mouth to an unconscious person. If swallowed, seek medical advice immediately and show the product's container or label.

Inhalation: Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

4.2. Most important symptoms and effects, both acute and delayed.

This product contains Bromadiolone, an indirect anticoagulant. Any signs of poisoning are unlikely to occur until 12-18 hours after ingestion. Thereafter, they will develop progressively and may rapidly appear. If ingested, symptom, which may be delayed, may include nosebleed and bleeding gums. In severe cases, there may be bruising, and blood present in the faeces or urine.

Long term chronic exposure may result in injury to certain organs or tissues.

Could be absorbed in contact with the skin and cause internal haemorrhage.

If swallowed serious risk of internal haemorrhage.

Other symptoms: pallor, abdominal or back pain.

4.3. Indication of any immediate medical attention and special treatment needed.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Keep the person comfortable. Turn him/her over to the left side and stay there while waiting for medical care.

As a rule, symptomatic treatment for compensating the observed effects.

Stomach-wash if haemorrhage symptoms are not observed.

In the event of haemorrhages, inject vitamin K1, control coagulation time, and if necessary, give fresh blood transfer.

Antidote: VITAMIINA K1 (Phytomenadione)

N.B. Vitamin K3 is not effective. For comprehensive medical advice on the treatment of poisoning, contact the nearest Poisons Information Centre.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing agents: Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable agents: Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam, as extinguishing media.

5.2. Special hazards arising from the substance or mixture.

This product is non-flammable, but combustible. May produce toxic fumes of carbon monoxide if involved in a fire.

5.3. Advice for firefighters

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account.

Wear self-contained breathing apparatus and appropriate protective equipment.

Fire residues and contaminated extinguishing media should be disposed according to current regulation. Do not allow extinguishing media to enter sewers, ground water or water courses.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personnel dealing with accidental spills and release of the mixture should wear personal protective equipment described in section 8 under “spillage”.

6.2. Environmental precautions

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3. Methods and material for containment and cleaning up.

Sweep up spilled material carefully. Avoid raising dust. Place in marked receptacle ready for disposal. Contact supplier for advice on disposal. See also section 13.

6.4. Reference to other sections

See section 8 for protective clothing.

See section 7 for safe handling.

See section 13 for disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

The product must be used in accordance with the product label.

- FOR USE ONLY BY PROFESSIONAL OPERATORS.
- AVOID ALL CONTACT BY MOUTH.
- PREVENT ACCESS TO BAIT by children, birds, and non-target animals particularly dogs, cats, pigs and poultry. Search for and remove rodent bodies at frequent intervals during treatment. Collect and dispose of the remains of bait and any remaining rodent bodies after treatment. You must ensure that you comply with legislation regarding the correct disposal of waste.
- HAZARDOUS TO WILDLIFE. DO NOT PLACE BAIT where food, feed or water could become contaminated.
- WASH HANDS AND EXPOSED SKIN before meals and after use.
- EMPTY CONTAINER COMPLETELY and dispose of safely.
- When working in rodent infested areas it is recommended that synthetic rubber/PVC gloves be worn to protect against rodent borne disease.
- Always attach labels to any containers used to carry bait decanted from the main container. Do not remove inner liner from outer bag.

7.2. Conditions for safe storage, including any incompatibilities.

Store in a dry, cool, and well-ventilated place. Keep the container closed, and store away from direct sunlight and sources of heat. Keep far away from ignition points. Keep away from oxidising agents and from highly alkaline or acidic materials. Do not smoke. Store in places inaccessible to children, birds, pets, and farm animals.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Work exposure limit for:

Name	DNEL/DMEL	Type	Value
2,6-di-tert-butyl-p-cresol CAS No: 128-37-0 EC No: 204-881-4	DNEL (Workers)	Inhalation, Chronic, Systemic effects	3.5 (mg/m^3)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

8.2. Exposure controls

Where exposure may occur engineering controls should be employed. A risk assessment should be carried out and the following PPE may be appropriate /required.

PPE	Item in use	Spillage
Respirators	Not needed under normal use.	Particle filter mask, category III. Covers nose, mouth, and chin. EN 149, filter type P2.
Gloves	Protective Gloves to EN 374 e.g., Nitrile.	Protective Gloves to EN 374 e.g., Nitrile.
Overall	Basic type e.g., Heavy duty polycotton or coverall type 5/6.	Basic type e.g., Heavy duty polycotton or coverall type 5/6.

Goggles / Face shield	Safety glasses to EN 166	Safety glasses to EN 166

General safety and hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink, and animal feeding stuffs.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Blue/Green whole wheat grain bait.
Odour:	Characteristic wheat odour.
Odour threshold:	No data
pH:	Not applicable.
Melting point/freezing point:	Not applicable.
Initial boiling point/boiling range:	Not applicable.
Flash point:	> 60°C
Evaporation rate:	Not applicable.
Flammability:	Not applicable
Upper/lower flammability or explosive limits:	No available data.
Vapor pressure:	Not applicable.
Vapor density:	Not applicable.
Relative density:	1.30 – 1.40
Solubility(ies):	Water: Insoluble. – No information for other solvents.
Partition coefficient n-octanol/water (log Kow):	No available data.
Auto-ignition temperature:	No available data.
Decomposition temperature:	No available data.
Viscosity:	No available data.
Explosive properties:	None, no ingredients with explosive properties.
Oxidising properties:	None, no ingredients with oxidizing properties.

9.2 Other Information

No further relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Not reactive mixture

10.2. Chemical stability

Stable under recommended conditions of storage and handling.

10.3. Possibility of hazardous reactions

None anticipated.

10.4. Conditions to avoid.

High temperatures, direct sunlight, humidity. Improper handling.

10.5. Incompatible materials

Store away from strong oxidising agents and from highly alkaline or acidic materials to prevent exothermic reactions.

10.6. Hazardous decomposition products

Carbon monoxide, oxides of nitrogen, and products toxic and irritant properties released if mixture is involved in a fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Classification of the product was conducted by calculation method according to regulation 1272/2008 based on the content of hazardous ingredients:

Name	Acute Toxicity			
	Type	Test	Kind	Value
Bromadiolone CAS No: 28772-56-7 EC No: 249-205-9	Oral	LD50	Rat	0.56 mg/kw bw
		LD50	Rats	1.31 mh/kg bw
		LD50	Mice	1.75 mg/kg bw
	Dermal	LD50	Rabbit	2.1 mg/kg bw
		LD50	Rabbit	1.71 mg/kq bw
		LD50	Rats	23.31 mg/kg bw
	Inhalation	LD50	Rat	0.00043 mg/l
		LD50	Rats	< 0.02 mg/l

a) acute toxicity: Not conclusive data for classification.
b) irritation: Skin, eyes, respiratory tract – no irritation potential expected. Information derived from the properties of the individual ingredients.
c) corrosivity: Based on data available classification criteria are not met.
d) sensitisation: Based on data available classification criteria are not met.
e) repeated dose toxicity: The product has not been tested. Repeated exposure to small quantities may affect certain organs, Damages the coagulation system.
f) carcinogenicity: product does not contain any compounds with carcinogenic hazard.
g) mutagenicity: product does not contain any compounds with germ cell mutagenicity hazard.
h) toxicity for reproduction: Product classified: Reproductive toxicant, Category 1B: May damage fertility or the unborn child.
i) aspiration: No information.
j) STOT-single exposure: Not conclusive data for classification.
k) STOT-repeated exposure: Product classified: Specific target organ toxicity following a repeated exposure, Category 1: Causes damage to organs through prolonged or repeated exposure

11.2. Other Data

See section 2.3

SECTION 12: Ecological information

12.1. Toxicity

Name	Ecotoxicity			
	Type	Test	Kind	Value
Bromadiolone CAS No: 28772-56-7 EC No: 249-205-9	Fish	LC50	Rainbow trout (Oncorhynchus mykiss) Fish	2.86 mg/L (96 h)
		LC50		2.2 mg/l (96 h)
	Aquatic invertebrates	EC50	Daphnia magna	5.79 mg/L (48 h)
		EC50	Crustaceans	1.12 mg/l (48 h)
	Aquatic plants	ErC50	Algae (Pseudokirchneriel)	1.14 mg/L (72 h)

12.2. Persistence and degradability

No information is available regarding the biodegradability of the substances present.
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No information is available about persistence and degradability of the product.

12.3. Bio accumulative potential

The active ingredient properties indicate a potential to bio-accumulate.

Sucrose: Log Pow: -2.7, very low

12.4. Mobility in soil

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5. Results of PBT and vPvB assessment

Does not meet requirement for assessment.

12.6. Other adverse effects

None known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal of uneaten product, empty containers and contaminated packaging must be made in accordance with the local law. For information on disposal in the UK contact the environment agency (www.environment-agency.gov.uk) or SEPA (www.SEPA.org.uk).
Dispose of unused product in the original container as hazardous waste.
Empty containers and contaminated PPE should be considered hazardous and disposed of appropriately.
Suggested European waste code 20 01 19.

SECTION 14: Transport information

14.1. UN number

Transportation is not dangerous.

14.2. UN proper shipping name

Description:

ADR/RID: Not classified as hazardous for transport.

IMDG: Not classified as hazardous for transport.

ICAO/IATA: Not classified as hazardous for transport.

14.3. Transport hazard class(es).

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Transport is not dangerous.

Transport by ship, FEm – Emergency sheets (F – Fire, S – Spills): Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code.

Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Labelling according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019
Control of Substances Hazardous to Health Regulations 2002 (as amended).
The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.
• Restricted to trained professional users in the UK and professional users in Ireland.
• Refer to other relevant measures such as the Health and Safety at Work etc Act 1974 and the COSHH regulations and guidance.

• The information contained in this data sheet does not constitute the user's own assessment of workplace risks as required by legislation.

Information related to Regulation No 528/2012 concerning the making available on the market and use of biocidal products: Numbers/approval status/European authorisation.

Active substances	Concentration (%)
Sodium Benzoate CAS NO: 532-32-1 EC No: 208-534-8	0.5
Bromadiolone CAS No: 28772-56-7 EC No: 249-205-9	0.005

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

Use only in accordance with label instructions.

Operatives using this product should be trained in its use.

The information in this data sheet should be considered when undertaking a risk assessment under the COSHH regulations.

Ingredient classification data:

Complete text of the H phrases that appear in section 3:

H300	Fatal if swallowed.
H310	Fatal in contact with skin
H330	Fatal if inhaled.
H360D	May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Classification Codes:

Acute Tox. 1: Acute toxicity (Dermal), Category 1
Acute Tox. 1: Acute toxicity (Inhalation), Category 1
Acute Tox. 1: Acute toxicity (Oral), Category 1
Aquatic Acute 1: Acute toxicity to the aquatic environment, Category 1
Aquatic Chronic 1: Chronic effect to the aquatic environment, Category 1
Repr. 1B: Reproductive toxicant, Category 1B
STOT RE 1: Specific target organ toxicity following repeated exposure, Category 1

Issue number (date)	Section amended
Issue (Mar 2018)	First creation.
Issue (Aug 2019)	Update to style and layout – some updates to minor wording.
Issue (Nov 2020)	Amended H and P phrases
Issue DEC 2021	Added Emergency number - update to section 15 Brexit regulation
Issue (Jun 2023)	Changes to specific hazards (section 2.3) and changes to hazardous components in product (section 3.2) Changes to: firefighting measures (section 5.2), accidental release measures (section 6.1), values of the physical and chemical properties (section 9), and hazard classification (section 11.1).

This safety data sheet does not constitute a COSHH assessment.

The information contained within this data sheet is strictly for general guidance only and should not be relied upon over and above this. This data sheet is intended to provide general health and safety guidance on the handling, storage and transportation of the preparation. The information provided in this data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted by Killgerm Chemicals Limited for any loss, injury or damage arising from any failure to comply with the information and advice contained within this data sheet and/or failure to comply with the manufacturer's guidelines, product label data and any associated technical usage literature.