

#### 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 Brodikill Whole Wheat UK-2017-1051

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

#### Relevant identified uses:

A ready to use rodenticide for use by trained professionals, for the control of mice and rats in and around buildings.

## Uses advised against:

Not to be used for pulsed or permanent baiting or applied directly to burrows.

## 1.3. Details of the supplier of the safety data sheet

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

# 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 Number 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]

STOT RE cat 2: H373 May cause damage to organs through prolonged or repeated exposure

#### 2.2. Label elements



### GHS08

Signal Word: Warning Hazard statements:

**H373:** May cause damage to organs through prolonged or repeated exposure.

# **Precautionary statements:**

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of the reach of children.

**P103:** Read the label before use.

P260: Do not breath dust.

P280: Wear protective gloves and clothing.

P314: Get medical advice attention of you feel unwell.

**P501:** Dispose of contents/container to point authorized to receive hazardous waste.

## **Contains:**

**Brodifacoum** 

## **Active substances:**

Brodifacoum, 0,0029%;

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#### 2.3. Other hazards

The mixture does not contain substances classified as PBT.

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
Brodifacoum CAS No: 56073-10-0 EC No.: 259-980-5	0.0029% w/w	Acute Tox. 1, H310 – Acute Tox. 1, H330 -Acute Tox. 1,H300 – Aquatic Acute 1, H400 (M=10) – Aquatic Chronic 1, H410 (M=10) - Repr. 1A, H360D - STOT RE 1, H372(sangre)	Repr. 1A, H360D: C ≥ 0,003 % STOT RE 1, H372(sangre): C ≥ 0,02 % STOT RE 2, H373(sangre): 0,002 % ≤ C < 0,02 %
Calcium dihydroxide CAS No: 1305-62-0 EC No: 215-137-3	0-1%	Eye Dam. 1, H318 – Skin Irrit. 2, H315 - STOT SE 3, H335	-
Denatonium Benzoate CAS No: 3734-33-6 EC No: 223-095-2	0.001%w/w	Acute Toxic Cat. 4 (Oral, Inhalation), H302, H332 - Skin irritation Cat. 2, H315 - Eye irritation Cat. 2, H319 - Aquatic Chronic Cat. 3, H412	-
2,2',2"-nitrilotriethanol CAS No: 102-71-6 EC No: 203-049-8	0-2.5%	-	-

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

# **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 all 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 Brodifacoum, an indirect anticoagulant. Any signs of poisoning are unlikely to occur until 12-18 hours after ingestion.

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

Substance is an anticoagulant and the risk is a potential internal haemorrhage.

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.

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#### 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: Vitamin K1 administered by medical/veterinary personnel only.

# **SECTION 5:** Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing agents:** Extinguishing powder or carbon dioxide. In case of more serious fires, also alcohol-resistant foam and water spray. Cool the smouldering material with water spray to minimise the possibility of reignition. Keep containers and surroundings cool with water spray.

**Unsuitable agents:** Do not use a direct stream of water to extinguish (water jet). 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

Wear self-contained breathing apparatus and appropriate protective equipment.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

## **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

Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr) and clean the area immediately with a suitable decontaminant. 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.
- 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.
- Always attach labels to any containers used to carry bait decanted from the main container.

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- Never use pressure to empty the containers. They are not pressure-resistant containers.
- Follow legislation on occupational health and safety.

See Section 8 for personal protection.

# 7.2. Conditions for safe storage, including any incompatibilities

Store according to local legislation. Store in a dry, cool and well-ventilated place. Keep the container closed, and store away from direct sunlight and sources of heat. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Store in places inaccessible to children, birds, pets, and farm animals. Shelf life: Two years.

## 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	Limit Value	mg/m³
Calcium Dihydroxide	Eight hours	1 (Respirable fraction)
CAS No. 1305-62-0	Short term	4 (Respirable fraction)

#### Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Туре	Value
Calcium dihydroxide	DNEL (Workers)	Inhalation, Chronic, Local effects	1 (mg/m³)
CAS No. 1305-62-0	DNEL (Workers)	Inhalation, Chronic, Systemic effects	1 (mg/m³)
EC No. 215-137-3			
	DNEL (Workers)	Inhalation, Chronic, Local effects	5 (mg/m³)
	DNEL (Consumers)	Inhalation, Chronic, Local effects	1.25 (mg/m³)
2,2',2"-nitrilotriethanol	DNEL (Workers)	Inhalation, Chronic, Systemic effects	5 (mg/m³)
CAS No: 102-71-6	DNEL (Consumers)	Inhalation, Chronic, Systemic effects	1.25 (mg/m³)
EC No: 203-049-8	DNEL (Workers)	Dermal, Chronic, Systemic effects	6.3 (mg/kg/bw/day)
	DNEL (Consumers)	Dermal, Chronic, Systemic effects	3.1 (mg/kg/bw/day)
	DNEL (Consumers)	Oral, Chronic, Systemic effects	13 (mg/kg/bw/day)

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

# **Concentration levels PNEC:**

Name	Details	Value	
	Aqua (freshwater)	0.32 (mg/L)	
2,2',2"-nitrilotriethanol	Aqua (marine water)	0.032 (mg/L)	
CAS No: 102-71-6	Aqua (intermittent releases)	5.12 (mg/L)	
EC No: 203-049-8	STP	10 (mg/L)	
	Sediment (freshwater)	1.7 (mg/kg sediment dw)	
	Sediment (marine water)	0.17 (mg/kg sediment dw)	
	Soil	0.151 (mg/kg soil dw)	

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

#### 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.

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PPE	Item in use	Spillage	
Respirators	Not needed under normal use.	Particle filter mask (EN149), plus a P2 filter	
Gloves	Protective Gloves to EN 374 e.g., Nitrile.	Protective Gloves to EN 374 e.g., Nitrile.	
Overall	Protective clothing to EN340 and Work footwear to EN ISO 13287	Protective clothing to EN340 and Work footwear to EN ISO 13287	
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:

Flammability:

Upper/lower flammability or explosive limits:

Vapor pressure:

Vapor density:

Relative density:

Not applicable.

Not applicable.

Not applicable.

1.30-1.40 (20°c)

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 (see Section 7).

### 10.3. Possibility of hazardous reactions

None anticipated.

#### 10.4. Conditions to avoid.

High temperatures, direct sunlight, humidity. Avoid any improper handling.

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#### 10.5. Incompatible materials

Store away from strong oxidising agents. Keep away from highly alkaline or acidic materials in order 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. No decomposition if used for the intended uses.

# **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			
	Туре	Test	Kind	Value
2,2',2"-nitrilotriethanol	Oral	LD50	Rat	5530 mg/kg bw
CAS No: 102-71-6	Orai	1030	Nat	JJJO Mg bw
EC No: 203-049-8		LD50	Rat	6400 mg/kg bw
EC NO: 203-049-8	Dermal	LD50	Rabbit	> 22500 mg/kg bw
Brodifacoum	Oral	LD50	Male mice	0.4 mg/kg bw
CAS No: 56073-10-0	Dermal	LD50	Female rats	3.16 mg/kg bw
EC No: 259-980-5		LD50	Male rats	5.21 mg/kg bw
	Inhalation	LC50	Female rats	3.05 ug/l (4h)
		LC50	Male rats	4.86 ug/l (4h)

- a) acute toxicity: Not conclusive data for classification
- b) skin corrosion/irritation: Skin, respiratory tract no irritation potential expected.
- c) eye damage: 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: Based on data available classification criteria are not met.
- i) aspiration: No information.
- j) STOT-single exposure: Based on available data, the classification criteria are not met
- **k) STOT-repeated exposure:** Product classified; Specific organ toxicity following a repeated exposure, Category 2: May cause damage to organs through prolonged or repeated exposure

## 11.2. Other Data

See section 2.3

# **SECTION 12:** Ecological information

#### 12.1. Toxicity

Data derived from the active ingredients.

Brodifacoum:

LC50 Bluegill sunfish 0.165mg/l (96hr),

LC50 Rainbow trout 0.04mg/I (96hr),

LC50 Daphnia magna >0.04mg a.i./I (48hr),

ErC50 Selenastum capricornutum >0.04mg/l (72hr)

# 12.2. Persistence and degradability

No information is available about persistence, biodegradability, and degradability of the product.

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#### 12.3. Bio accumulative potential

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

2-2'-2"-nitrilotriethanol

Log Pow: -1, Very low

#### 12.4. Mobility in soil

No Data is available about the mobility in soil.

The product must not enter sewers or waterways. Prevent penetration into the ground

# 12.5. Results of PBT and vPvB assessment

No information available about the results of PBT and vPvB assessment of the product.

#### 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 (<a href="www.environment-agency.gov.uk">www.environment-agency.gov.uk</a>) or SEPA (<a href="www.sepa.org.uk">www.sepa.org.uk</a>).

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

Not applicable, transport is not dangerous.

### 14.2. UN proper shipping name

Not applicable

# 14.3. Transport hazard class(es).

Not applicable

# 14.4. Packing group

Not applicable

## 14.5. Environmental hazards

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

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- 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

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

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:

H300: Fatal if swallowed.

**H310:** Fatal in contact with skin.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H330: Fatal if inhaled.

**H335:** May cause respiratory irritation. **H360D:** May damage the unborn child.

**H372:** Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.(sangre)

**H373:** May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.(sangre)

**H400:** Very toxic to aquatic life.

**H410:** Very toxic to aquatic life with long lasting effects.

#### **Classification Codes:**

Acute Toxicity category 1 (Oral)

Acute Toxicity category 1 (Dermal)

Acute Toxicity category 1 (Inhalation)

Aquatic Acute 1: Acute toxicity to the aquatic environment, Category 1

Aquatic Chronic 1: Chronic effect to the aquatic environment, Category 1

Eye Dam. 1: Serious eye damage, Category 1 Repr. 1A: Reproductive toxicant, Category 1A

Skin Irrit. 2: Skin irritant, Category 2

STOT RE 1: Specific target organ toxicity following a repeated exposure, Category 1

STOT RE 2: Specific target organ toxicity following a repeated exposure, Category 2

STOT SE 3: Specific target organ toxicity following a single exposure, Category 3

Issue number (date)	Section amended
Issue (Jul 2018)	First creation.
Issue (Aug 2019)	Update to style and layout – some updates to minor wording.
Issue (Dec 2021)	Addition of emergency number – and section 15 Brexit regulations
Issue (Jun 2023)	Changes in the composition of the product (Section 2.3) and modification in the firefighting measures (Section 5.2). Modification to exposure control parameters (Section 8.1) and updated values of the physical and chemical properties (Section 9). Modification of toxicity values and change in the hazard classification (Section 11.1). Updated Emergency Number.

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#### 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.

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