



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

1.1 Product identifier

Sakarat Warfarin UK: GB-2017-1059 NI: NI-2017-1059

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

Relevant identified uses:

A professional use, cereal based rodenticide for use only on rats in and around buildings, open areas and waste dumps.

Uses advised against:

Not to be used for pulsed or permeant baiting.

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

Killgerm Chemicals Ltd Tel:01924 268452 (Office hours) Emergency Line 08701906777

UK: Medical professionals should use National Poisons Information Service Tel: 0870 600 6266.

Non-medical professionals should seek information by contacting NHS by dialling 111.

IRELAND: Medical professionals should contact The national Poisons centre, Beaumont Hospital, Dublin (01-8092166)

SECTION 2: Hazards identification

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

Repro tox cat 1A: H360D May Damage the unborn child.

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

2.2. Label elements



GHS08

Signal Word: **DANGER Hazard statements:**

H360D: May cause damage to the unborn child.

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

Precautionary statements:

P102: Keep out of the reach of children.

P103: Read the label before use.

P201: Obtain special instructions before use.

P202: Do Not handle until all safety precautions have been read and understood.

P260: Do not breath dust.

P270: Do not eat, drink, or smoke when using this product.

P280: Wear protective gloves and clothing.

P301+P313: IF exposed or concerned: Get medical advice/attention.

P314: Get medical advice/attention if you feel unwell.

P404+P405: Store locked up: store in a closed container.

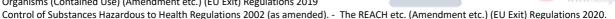
P501: Dispose of contents/container to point authorized to receive hazardous waste

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

Date of issue: Dec 2022

Replaces version issued: Jul 2019 Page 1 of 7

Labelling according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019



2.3. Other hazards

Warfarin, an indirect anticoagulant. Any signs of poisoning may be delayed 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.

This product is hazardous to mammals including domesticated animals, and birds if ingested. Exposure of non-target animals should be prevented.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous Components in Product

Ingredient Name	Classification	Concentration	H Phrases
Warfarin CAS No.: 81-81-2 EC No.: 201-377-6	Acute Tox. Cat. 1 (Oral, Dermal, Inhalation) Repr. Tox. 1A STOT RE Cat. 1 Aquatic Chronic Cat. 3	0.05% W/W	H300, H310, H330 H360D H372 H412
Denatonium Benzoate CAS No.: 3734-33-6 EC No.: 223-095-2	Acute Toxic Cat. 4 (Oral, Inhalation) Skin irritation Cat. 2 Eye irritation Cat. 2 Aquatic Chronic Cat. 3	0.001% W/W	H302, H332 H315 H319 H412

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 contaminated clothing. Wash with water and then wash with soap and water.

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 where possible.

Inhalation: Remove from exposure. Get medical attention if symptoms develop.

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

This product contains Warfarin an anticoagulant. Any signs of poisoning may be delayed until 12-18 hours after ingestion. Thereafter, they will develop progressively and may rapidly appear. If ingested, symptoms, 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.

Clinical signs result from an increased bleeding tendency and include: an increase in prothrombin time, bruising easily with occasional gum bleeding, blood in the stool or urine, excessive bleeding from minor cuts and abrasions, pale mouth and cold gums, anorexia and general weakness. More severe cases of poisoning include haemorrhage (usually internal) and shock.

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

In the case of suspected poisoning, determine prothrombin time not less than 18 hours after consumption. If elevated, administer vitamin K1, 40mg/day for adults and 20mg/day for children in divided doses. Continue until prothrombin times normalise. Continue determination of prothrombin time for two weeks after withdrawal of the antidote and resume treatment if elevation occurs in that time. N.B. Vitamin K3 is not effective. For comprehensive medical advice on the treatment of poisoning, contact the nearest Poisons Information Centre.

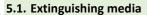
SECTION 5: Firefighting measures

Date of issue: Dec 2022

Replaces version issued: Jul 2019 Page 2 of 7

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.





Suitable extinguishing agents: Use water spray, foam, dry chemical or carbon dioxide. Cool the smouldering material with water spray to minimise the possibility of re-ignition. Keep containers and surroundings cool with water spray.

Unsuitable agents: water jet.

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.

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

Do not allow the product to get to the sewers, ground and surface waters. Do not rinse product to the sewers. In case of water contamination - inform appropriate authorities immediately.

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. 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

Date of issue: Dec 2022

Replaces version issued: Jul 2019 Page 3 of 7

Labelling according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019



8.1. Control parameters

Contains no substances with work place exposure limits.

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.	Half mask respirator (EN140), plus P class filter (EN143) to required (nominal) protection factor (minimum).	
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: 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: Not applicable. Not applicable. Evaporation rate: Flammability: Not applicable Upper/lower flammability or explosive limits: No available data. Vapor pressure: Not applicable. Vapor density: Not applicable. Relative density: 0.7 (20°c) Solubility(ies): Not applicable. Partition coefficient n-octanol/water (log Kow): No available data. Auto-ignition temperature: No available data. Decomposition temperature: No available data.

Explosive properties: None, no ingredients with explosive properties.

Oxidising properties: None, no ingredients with oxidizing properties.

No available data.

9.2 Other Information

No further relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Viscosity:

Date of issue: Dec 2022

Replaces version issued: Jul 2019 Page **4** of **7**

Labelling according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019



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.

10.5. Incompatible materials

Store away from strong oxidising agents and odorous chemicals

10.6. Hazardous decomposition products

Carbon monoxide, oxides of nitrogen, and chemical products with 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:

a) acute toxicity: Information has been derived from the properties of the individual ingredients.

Oral LD50 (rat) >2000mg/kg

- **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: Based on data available the product is classified as potentially causing harm to an unborn child.. The product has not been tested. The statement has been derived from the properties of the individual components.
- i) aspiration: No information.

11.2. Other Data

See section 2.3

SECTION 12: Ecological information

12.1. Toxicity

The Warfarin in this product is classified as very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. However, when used in accordance with instructions, controlled release of this product is not expected to cause environmental contamination

Toxicity data for the active ingredients.

Warfarin:

LC₅₀ Rainbow trout (Onoryhnchus mykiss) 65mg/L (96h)

EC₅₀ Daphnia magna >105mg/L (48h)

E_rC₅₀ Algae (Desmodesmus subspicatus) >83.2mg/L (72h)

Growth inhibition / NOEC / Scenedesmus capricornutum (fresh water algae): 0.34 mg/l

12.2. Persistence and degradability

Warfarin Is not readily biodegradable

12.3. Bio accumulative potential

No data available.

12.4. Mobility in soil

Date of issue: Dec 2022

Replaces version issued: Jul 2019 Page **5** of **7**



Labelling according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019



No data available.

12.5. Results of PBT and vPvB assessment

No data available.

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

Not applicable

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

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.

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.

Date of issue: Dec 2022

Replaces version issued: Jul 2019 Page **6** of **7**



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.

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

Ingredient classification data:

Acute Toxicity category 1 (Oral)

Acute Toxicity category 4 (Oral)

Acute Toxicity category 1 (Dermal)

H300: Fatal if swallowed

H302: Harmful if swallowed

H310: Fatal in contact with skin

Acute Toxicity category 1(inhalation)

Acute Toxicity category 4(inhalation)

Skin Irritation category 2

H315: Causes skin irritation

Eye Irritant category 2

H319: Causes serious eye Irritation

Reproductive Toxicity category 1A H360: May damage fertility or the unborn child

Specific Target Organ Toxicity repeat exposure category 1 H372: Causes damage to organs through prolonged or

repeated exposure

Aquatic Chronic category 3 H412: Harmful to aquatic life with long-lasting effects.

Issue number (date)	Section amended	
Issue (Mar 2017)	First creation.	
Issue (Sept 2019)	Update to style and layout – some updates to minor wording.	
Issue (Dec 2021)	Added emergency number – updated section 15 Brexit legislation	

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.

Date of issue: Dec 2022

Replaces version issued: Jul 2019 Page **7** of **7**