

1 Identification of the preparation and the supplying Company

- 1.1 Sakarat Warfarin Whole Wheat (UK-2017-1059)
 1.2 Ready to use cereal based rodenticide. For use against rats by professionals only
 1.3 Killgerm Chemicals Ltd, Wakefield Road, Ossett, West Yorkshire, WF5 9AJ.
 Tel: +44 (0)1924 268450 Fax: (0)1924 265033 Email: technical@Killgerm.com
 1.4 Emergency telephones. Medical professionals should use National Poisons Information Service 0870 600 6266. Killgerm Chemicals Ltd, 01924 268452 (Office hours)
 Non-medical professionals should seek information by contacting NHS 111, Tel :111

2 Hazards identification

2.1. Classification of the substance or mixture



Repro tox cat 1A

H360 May Damage the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure

2.2. Label elements

The following precautionary phrases are appropriate (Regulation (EC) 1272/2008):

Signal word: Danger

P280 Wear protective gloves

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

P308+P313 If exposed or concerned get medical advice/attention

P405 Store locked up

P501 Dispose of contents/container in accordance with national regulations

Additional safety Information

To avoid risks to human health and the environment, comply with instructions for use. Use bait containers clearly marked "poison" at all surface baiting points. Remove all remains of bait, dead rodents during and after treatment and dispose of safely. Prevent access to bait by children, domesticated animals and pets, (particularly cats, dogs and pigs). Harmful to wildlife.

2.3. Other hazard

3 Composition and information on ingredients

3.2. Mixtures

Hazardous Components in Product

Ingredient Name	Classification	Concentration	H Phrases
Warfarin	Repr 1A, STOT RE1 , Aquatic Chronic 3 (under 1272/2008CLP)	0.05%w/w	H360,H330, H372, H412,H310,H300

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

4 First Aid measures

4.1. Description of first aid measures

Ingestion (swallowing): Wash out mouth with water. Do not induce vomiting. Seek medical advice immediately (Show label where possible).

Inhalation: Unlikely route of exposure. Remove from exposure to fresh air. Obtain medical advice if symptoms develop.

Skin contact: Wash skin with soap and water. Remove and launder any contaminated clothing.

Eye contact: Remove contact lenses if present and rinse the eye slowly and gently for 15-20 minutes. Seek medical advice immediately.

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

Symptoms of poisoning: Spontaneous haemorrhage from the nose, into the skin or internal organs. Onset may be delayed.

First Aid: If any of the above symptoms occur, particularly if there is known contamination (including on previous occasions): Stop work.

Remove all contaminated clothing, wash exposed skin and hair.

Prevent all exertion.

Call doctor AT ONCE and show label.

Guide to doctor: This product contains warfarin, an anticoagulant.

Treatment:

Warfarin is an anticoagulant which may produce bleeding; this may be delayed for several days after exposure. If there is no active bleeding the INR (prothrombin time) should be measured on presentation and 48-72 hours after exposure. If the INR is greater than 4, administer vitamin K1 (phytomenadione) 5-10mg by slow intravenous injection (100µg/kg body weight for a child). Treatment with phytomenadione (orally or intravenously) may be required for several weeks. The advice of the National Poisons Information Service (<http://www.npis.org/>) should be sought, particularly if active bleeding occurs.

4.3. Indication of any immediate medical attention and special treatment needed ...See 4.2

5 Fire-fighting measures

5.1. Extinguishing media

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.

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 fire-fighters

Wear self-contained breathing apparatus

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: In case of accidental spills keep away from drains, surface and ground water.

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:

Refer to section 8 and 13 for additional information.

7 Handling and storage

7.1. Precautions for safe handling

For professional use only. To be used only by professional users holding certification demonstrating compliance with UK rodenticide stewardship regime requirements. Read the label before use. Using this product in a manner that is inconsistent with the label may be an offence. |Refer to the CRRU UK Code of best practice (or equivalent) for guidance. When this product is supplied to a user for the control of rodents, it shall only be supplied to a professional user holding certification demonstrating compliance with UK rodenticide stewardship regime requirements.

Wash hands and exposed skin before meals and after use.

Keep locked up and out of reach of children.

The resistance status of the target population should be taken into account when considering the choice of rodenticide to be used. . In those areas where evidence of resistance to specific active ingredients is suspected, avoid their use. To control the spreading of resistance, it is advisable to alternate baits containing different anticoagulant active ingredients.

Baits must be securely deposited in a way so as to minimize the risk of consumption by other animals or children. Where possible, secure baits so that they cannot be dragged away.

Prevent access to bait by children, birds and non-target animals (particularly dogs, cats, pigs and poultry).

Unless under the supervision of a pest control operator or other competent person, do not use anticoagulant rodenticides as permanent baits. In most cases, anticoagulant bait should have achieved control within 35 days. Should activity continue beyond this time the likely cause should be determined.

Search for and remove dead rodents at frequent intervals during treatment, at least as often as when baits are checked and/or replenished. Daily inspection may be required in some circumstances.

Dispose of dead rodents in accordance with local requirements. Poisoned rodents may be disposed of by the waste producer at an incinerator or landfill permitted to accept that type of waste, or collected by a registered waste carrier and taken for disposal at a suitably permitted site. For further information on disposal contact the Environment Agency (<http://www.environment-agency.gov.uk>) or SEPA (<http://www.sepa.org.uk>).

When the product is being used in public areas and tamper resistant bait stations are not used, the areas treated must be marked during the treatment period and a notice explaining the risk of primary or secondary poisoning by the anticoagulant as well as indicating the first measures to be taken in case of poisoning must be made available alongside the baits.

When tamper resistant bait stations are used, they should be clearly marked to show that they contain rodenticides and that they should not be disturbed.

Antidote vitamin K1 (under medical supervision). UK medical professionals should contact the National Poisons Information Service (www.npis.org) for further advice.

The product may be applied by professional users only when appropriate chemical resistant gloves (EN 374) are used.

7.2. Conditions for safe storage, including any incompatibilities

STORE IN ORIGINAL CONTAINER, tightly closed, in a safe place. Store in a cool dry place. Protect from frost.

7.3. Specific end use(s)

For use as a rodenticide

8 Exposure controls and personal protection

8.1. Control parameters

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		Half mask respirator to EN140 plus P class filter to EN 143 to required (nominal) protection factor (minimum).
Gloves	Unlined/Flock lined, synthetic rubber/PVC to EN 374. (300mm in length) e.g. Nitrile.	Unlined/Flock lined, synthetic rubber/PVC to EN 374. (300mm in length) e.g. Nitrile
Overall	Basic type e.g. Heavy duty polycotton or coverall type 5/6.	Coverall type 5/6.
Goggles/ Face shield		Goggles to EN 166 3459B.

9 Physical and chemical properties

9.1. General information

Appearance: green wheat particles

Odour: characteristic wheat odour

Odour Threshold: not applicable

pH: Not applicable

Melting point/freezing point: not applicable

Initial BP and boiling range: not applicable

Flashpoint: not applicable

Evaporation rate: not applicable

Flammability: not applicable

Upper/lower flammability or explosive limit: not applicable

Vapour pressure: not applicable

Vapour density: not applicable

Relative density: 0.7

Solubility(ies): not applicable

Partition coefficient: n-octanol/water:

Auto-ignition temperature:

Decomposition temperature:

Viscosity: not applicable

Explosive properties: not explosive

Oxidising properties: not an oxidiser

10 Stability and reactivity

10.1. Reactivity: Not reactive mixture

10.2. Chemical stability: Mixture is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3. Possibility of hazardous reactions: None anticipated

10.4. Conditions to avoid: Avoid extremes of temperature

10.5. Incompatible materials: Store away from strong oxidising agents and odorous chemicals

10.6. Hazardous decomposition products: Carbon monoxide and oxides of nitrogen, toxic and irritants released if mixture is involved in a fire.

11 Toxicological information

11.1 Information on toxicological effects

(a) Acute toxicity: Information has been derived from the properties of the individual ingredients. Oral LD50 (rat) >2000mg/kg

Inhalation- Not an anticipated route of exposure.

(b) Corrosive/Irritation: Skin eyes, respiratory tract – no irritation potential expected. Information derived from the properties of the individual ingredients

(c) Sensitisation: contains no known skin or respiratory sensitizers.

(d) Repeated dose toxicity: The product has not been tested. Repeated exposure to small quantities may affect certain organs, Damages the coagulation system.

(e) Mutagenicity/Carcogenicity: Product does not contain any ingredients known to have such effects.

(f) Reproductive toxicity: The product is classed as a Reproductive tox cat 1a.

11.2 Other data: see section 2.3

12 Ecological information

12.1. Toxicity: The warfarin in this product is classified as 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. The following data is for components of the mixture

Toxicity to fish: LC50 (96 h) 65 mg/l, *Oncorhynchus mykiss*

LC50 17.5mg/l Bluegill sunfish *Lepomis macrochirus*

Aquatic invertebrates: EC50 17mg/l *Daphnia magna* (water flea)

Aquatic plants: Cell multiplication Inhibition test/ NOEC/ *scenedesmus capricornutum* (fresh water alga) 0.073mg/l

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

- Warfarin EC50/72h/*Desmodesmus subspicatus* (*Scenedesmus subspicatus*): >83.2mg/l
- Toxicity to aquatic invertebrates- Warfarin EC50/48h/*Daphnia magna* (Water flea): > 105mg/l

12.2. Persistence and degradability: warfarin not readily biodegradable

12.3. Bio accumulative potential: no data available

12.4. Mobility in soil: no data available

12.5. Results of PBT and vPvB assessment: no data available

12.6. Other adverse effects:**13 Disposal considerations****13.1. Waste treatment methods**

- Empty outer pp 20k bag, uncontaminated- classified non-hazardous. EWC code 15 01 02. Consider recycling route.
- Empty outer pp 20k bag, contaminated but shaken empty. EWC code 20 01 19.
- Empty inner liner (20k bag), contaminated but shaken empty. EWC code 20 01 19.
- Empty pp bag plus inner liner, contaminated but shaken empty. EWC code 20 01 19.
- Coveralls, gloves, other PPE, contaminated. EWC code 15 02 03. Waste classification non-hazardous. None of hazardous properties apply.
- Spent bait. EWC code 20 01 19. Biocide solid waste. Waste classification hazardous.
- Contact supplier, local authority or Environment Agency for advice about disposal of waste

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 MARPOL73/78 and the IBC Code:** Not applicable**15 Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:**

Classification & Labelling according to Regulation (EC) No 1272/2008

Control of Substances Hazardous to Health Regulations 2002 (as amended).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

- Restricted to professional users.
- 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.
- Hazard symbols: - Exploding chest GHS08
- This product is approved under the Biocidal products regulation UK-2017-1059.

15.2. Chemical safety assessment: Advice on product handling can be found in sections 7 and 8.**16 Other information**

This 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.

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

Repr 1A, Reproductive toxic category 1A

STOT RE1 , Specific target organ toxicity- repeat exposure category 1

Aquatic Chronic 3, Chronic aquatic toxicity category 3

H360: May damage fertility or the unborn child

H330: Fatal if inhaled

H372: Causes damage to organs through prolonged or repeated exposure

H412: Harmful to aquatic life with long lasting effects

H310: Fatal in contact with skin

H300: Fatal if swallowed
