Sakarat D Liquid Bait 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 D Liquid Bait : UK (GB-2017-1113), NI (NI-2017-1113)

UFI: VH00-X0EE-T004-SXP0

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

Relevant identified uses: A ready-to-use liquid bait containing Difenacoum (0.005%w/w) for use as a rodenticide by professionals for the control of rats and mice indoors and outdoors (around buildings only) for the protection of public health, stored products, and materials.
Uses advised against: Not to be used for Permanent baiting or any use not specified in this section or in section 7.3.

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

UK: 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]

Repr. 1B; H360D May cause harm to unborn child.
STOT RE 2; H373 May cause damage to organs (blood) through prolonged or repeated exposure

2.2. Label elements

GHS08

Signal Word: **DANGER**

Hazard statements:

H360D: May cause damage to unborn child.
H373: May cause damage to organs (blood) 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 breathe dust/fumes/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P308 + P313: IF exposed or concerned: Get medical advice/attention.
P314: Get medical advice/attention if you feel unwell.
P405: Store locked up.
P501: Dispose of contents/container in accordance with local regulation.

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. Do not spill the product on the ground. Do not place the product in water courses or sinks, do not pour down the drain. Do not open the bottle, unless attaching to the roll-on dispenser. 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 hazards

None expected under normal conditions of use. This product contains Difenacoum, an indirect anticoagulant and antagonistic competitor of vitamin K, therefore it decreases the hepatic synthesis of K-dependent coagulation factors. It causes a reduction in the prothrombin rate 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	Specific concentration limits	Concentration	H Phrases
Difenacoum (ISO) CAS Number: 56073-07-5 EC No. 259-978-4	Acute Tox. 1 (Oral) Acute Tox. 1 (Dermal) Acute Tox. 1(Inhalation) Repr. 1B STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1	Repr. 1B; H360D: C ≥ 0.003 % STOT RE 1; H372 (blood): C ≥ 0.02 % STOT RE 2; H373 (blood): 0.002% ≤ C < 0.02% M = 10 M = 10»	0.005% w/w	H300 H310 H330 H360D H372 H400 H410
Denatonium benzoate CAS Number: 3734-33-6 EC No. 223-095-2	Acute Tox. 4 Skin Irrit. 2 Eye Dam. 1 Aquatic Chronic 3	N/A	0.001% w/w	H302, H332 H315 H318 H412
Propylene glycol CAS No. 57-55-6 EC No. 200-338-0	N/A	N/A	1.75%	N/A
Other substances	N/A	N/A	Up to 100%	N/A

See section 16 for full text of R-phrases, 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. First aid antidote: Vitamin K1 administered inly by medical/veterinary personnel.

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 with water and then 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.

Inhalation: Remove from exposure. Get medical attention if any symptoms persist.

Contact a veterinary surgeon in case of ingestion by a pet.

DO NOT LEAVE POISONED PERSON ALONE UNDER ANY CIRCUMSTANCE.

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

This product contains Difenacoum, an indirect anticoagulant. Any signs of poisoning are unlikely to occur until 24+ hours after ingestion. Thereafter, they will develop progressively and may rapidly appear. If ingested, symptoms may become evident after a free interval of 36-48 hours. The prolonged prothrombin time (PT) due to a toxic dosage of coumarins or indadiones may become evident during 24 hours but may reach a maximum of 36 to 72 hours.

Clinical examination: Symptoms are very varied, but will depend on the dose, the agent involved and the exposure time. In acute ingestion of rodenticides, the first symptoms may be nausea and vomiting. 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, and general weakness. The most important adverse effect is the appearance of a haemorrhagic event, which can range from the presence of haemorrhagic diathesis to the risk of internal bleeding.

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

ADVICE FOR DOCTORS: Difenacoum is an indirect anti-coagulant. Phytomenadione and Vitamin K1 are antidotal. 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 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

5.1. Extinguishing media

Suitable extinguishing media: Use water spray, foam, dry chemical, or carbon dioxide.

Unsuitable extinguishing media: None.

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 a chemical protection suit, self-contained breathing apparatus, and an airtight suit in the immediate vicinity of the product or stream.
Should keep containers cool by spraying with water. Spray with water to reduce fire emissions.
Check that the water to extinguish the fire did not reach any water channel or drains. If this occurs, notify authorities.
Fires in confined spaces must be extinguished by qualified personnel with correct breathing equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Use personal protective equipment (Section 8). Refer to protective measures listed in sections 7 and 8.

6.2. Environmental precautions

Dangerous to aquatic organisms.
Avoid the product encountering any surface or underground water. If this occurs, immediately notify the appropriate authorities.
To minimise the risk of secondary poisoning, remove dead rodents when monitoring bait stations.
Remove dead rodents and bait stations after completing the treatment and dispose of them according to current legislation.

Do not dispose of the product in the ground, in natural water systems, drains or soil.

6.3. Methods and material for containment and cleaning up

Mix spillage with sand, earth, or sepiolite. Wash the contaminated area once absorbent material is removed.
Absorbent material and washing water used should be stored in a suitable container, as outlined in section 13.
For large spills, use barricades of absorbent material to prevent spreading. Mark contaminated area. See section 13

6.4. Reference to other sections

See also sections 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Read the label carefully before opening the package.
- Remove and possibility of inhalation and contact with skin and eyes.
- Follow instructions to avoid risk to humans and the environment.
- Do not eat, drink, or smoke during use.
- Wear suitable protective gloves and goggles or face shield, gloves, and rubber boots.
- Wash hands and exposed skin to rid of product and contaminated clothing.
- Take personal protection measures set out in section 8.

7.2. Conditions for safe storage, including any incompatibilities

Store in the original container under cool and dry conditions in a secure, well-ventilated place. Store away from sources of heat and ignition. Keep out of reach of children. Keep away from foodstuffs and animal feed. Store and transport away from products which may have an odour

7.3. Specific end use(s)

Before using this product read the instructions for use. The product is intended for use only as a rodenticide. Do not use for any other purpose other than those specified in this SDS or on the product label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No specific national limit values have been established.

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.

Based on an external test carried out by the manufacturer regarding dermal absorption, an absorption of 56.66% of difenacoum was obtained in the case of the product containing 0.005% proportion of active ingredient.

PPE	Item In Use	Spillage
Respirators		Use half-mask (EN140) with a particle filter P2 (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.
Overalls	Basic type e.g. Heavy duty polycotton or coverall type 5/6.	coverall type 5/6.
Goggles / Face shield		Safety glasses to EN 166 3459B.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Blue-green liquid
Odour:	Odourless.
Odour threshold:	No available data.
pH:	N/A
Melting point/freezing point:	Not applicable.
Initial boiling point/boiling range:	Not applicable.
Flash point:	No available data
Evaporation rate:	No available data
Flammability:	Not applicable.
Upper/lower flammability	No available data.
Vapour pressure:	Not applicable.
Vapour density:	Not applicable.
Relative Density:	1.016 gr/ml
Solubility in water:	No available data
Solubility in other solvents:	No available data.
Partition coefficient:	No available data.
Auto-ignition temp:	Not Applicable.
Decomposition temp:	No available data.
Viscosity:	at 20ºC 1.26 mm2/s at 40ºC 1.98 mm2/s

Explosive properties:	Product is not explosive
Oxidising properties:	No oxidising properties.

SECTION 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 under normal conditions.

10.4. Conditions to avoid

Keep the product out of direct sunlight and other sources of heat above 40°C.

10.5. Incompatible materials

Avoid contact with strong oxidising agents, strong acids, and metals such as tin and soft steel.

10.6. Hazardous decomposition products

There should be no hazardous decomposition products under normal conditions of storage and use. However, carbon monoxide, oxides of nitrogen, and decomposition products with toxic or irritant properties are released if the mixture is involved in a fire.

SECTION 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 1.8 mg/kg. Ingestion of high doses cause bleeding.

Dermal DL50 63 mg/Kg bw.

Inhalation: 3.646-5.848 mcg/L/4h

16.27-20.74 mcg/L/4h

b) irritation; Skin eyes, respiratory tract – no irritation potential expected. Information derived from the properties of the individual ingredients

c) corrosivity; The product is not classified as corrosive

d) sensitisation; Contains no known skin or respiratory sensitizers.

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/mutagenicity; Product does not contain any ingredients known to have such effects.

g) toxicity for reproduction; may cause harm to the unborn child.

h) Specific target organ toxicity (STOT) single exposure: Based on data available classification criteria are not met.

i) Specific target organ toxicity (STOT) repeated exposure: Based on data available classification criteria are not met.

j) aspiration: Based on data available classification criteria are not met.

11.2. Other Data

See section 2.3

SECTION 12: Ecological information

12.1. Toxicity

Difenacoum (56073-07-5) 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.

Information on: Difenacoum

Toxicity to fish: LC50 (96 h) 0.064 mg/l, Oncorhynchus mykiss (Directive 92/69/EEC, C.1)

Aquatic invertebrates: EC50 (48 h) 0.52 mg/l, Daphnia magna (Directive 92/69/EEC, C.2)
Pseudomonas putida 6 h EC50 >2.3 mg/l
Aquatic plants: No observed effect concentration (72 h) 0.25 mg/l (growth rate), Pseudokirchneriella subcapitata.
Effects on earthworms and other non-target soil organisms: Eisenia Fetida LC50 more than 994 mg/kg dry weight.
Toxicity on Birds: Japanese quail LD50 133 mg/KG female - Bobwhite quail LD50 56 mg/KG female
Mammals: LD50 Male rat 1,8 mg/kg. - Rata Female rat 5-50 mg/kg

12.2. Persistence and degradability

Difenacoum is not biodegradable, it degrades under aerobic conditions in the soil. Degradation in soil is slow with a half-life of 439 days.

12.3. Bioaccumulative potential

Difenacoum: Because of the n-Octanol/Water distribution coefficient (log Pow) accumulation in organisms is possible.

12.4. Mobility in soil

Experimental evidence shows that Difenacoum cannot mobilize in soil.
Assessment transport between environmental compartments: No available information.
Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

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 the product, empty containers and contaminated packaging must be made in accordance with the local law.

All the items related with the product must not be disposed of with household waste or into the aquatic environment.

Please contact the supplier, local authority, or the Environmental Agency for advice about disposal.

- Empty containers completely (as far as possible). Dispose of empty contaminated, containers as spent bait.
- spent bait – EWC code 20 01 19 – Biocide solid waste. Waste classification: Hazardous.
- Do not reuse empty containers for other purposes.
- Coveralls, gloves, and other PPE, contaminated. EWC code 20 01 19.
- 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 items.
- incineration is the recommended method of disposal, for the product and packaging.

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. Environmental hazards

No

14.5. Special precautions for user

Store product in the original sealed container.

14.6. 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.

• 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

Advice on product handling can be found in sections 7 and 8.

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:

Acute Toxicity Category 1 (Oral)	H300 Fatal if swallowed.
Acute Toxicity Category 3 (Oral)	H302 Harmful if swallowed.
Acute Toxicity Category 1 (Dermal)	H310 Fatal in contact with skin.
Skin irritant category 2	H315 Causes skin irritation.
Eye damage category 1	H318 Causes serious eye damage.
Acute toxicity Category 1 (Inhalation)	H330 Fatal if inhaled.
Acute toxicity Category 3 Inhalation)	H332 Harmful if inhaled.
Reproductive Toxicity Category 1	H360D May damage the unborn child.
Single target organ toxicity – Repeat exposure Category 1	H372 Causes damage to organs through prolonged or repeated exposure. (Blood)
Single target organ toxicity – Repeat exposure Category 2	H372 May Cause damage to organs through prolonged or repeated exposure. (Blood)
Aquatic Toxicity Acute Category 1	H400 Very toxic to aquatic life.
Aquatic Toxicity Chronic Category 1	H410 Very toxic to aquatic life with long lasting effects.
Aquatic Toxicity Chronic Category 3	H412 Harmful to aquatic life with long lasting effects.

Issue number (date)	Section amended
Version (Dec 2017)	SDS was first produced
Version (Jan 2020)	Minor updates to text and layout.
Version (Sept 2021)	Updates to regulatory information.
Version (Jan 2022)	Added emergency number
Version (Jan 2024)	Updated emergency number and addition of UFI. Updates to section 3.2, 9.1 and 11.1. Updates to wording and phrasing throughout the SDS.

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.