Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



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

1.1 Product identifier

Sakarat D Liquid bait: (UK-2017-1113)

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.

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)

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



Signal word: Danger

H360D May cause damage to unborn child.

H373 May cause damage to organs (blood) through prolonged or repeated exposure.

P201 Obtain special instructions before use.

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

P260 Do not breathe dust.

P280 Wear protective gloves.

P308 + P313 If exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

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.

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2.3. Other hazards



None expected under normal conditions of use. This product contains Difenacoum, 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.

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.

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
Difenacoum technical	Acute Tox. 1 (Oral)	0.005% w/w	H300
material	Acute Tox. 1 (Dermal)		H310
CAS Number:	Acute Tox. 1(Inhalation)		H330
56073-07-5	Repr. 1B		H360D
	STOT RE 1		H372
	Aquatic Acute 1		H400
	Aquatic Chronic 1		H410
Denatonium benzoate	Acute Tox. 4	0.001% w/w	H302, H332
CAS Number:	Skin Irrit. 2		H315
3734-33-6	Eye Dam. 1		H318
	Aquatic Chronic 3		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

- Move the person away from the contaminated area and remove any contaminated or spattered clothing.
- Keep the patient at rest and maintain body temperature.
- Check breathing. If necessary, give artificial respiration.
- If person is unconscious, turn them onto their side, with the head lower than the rest of the body and the knees bent.
- If necessary take the person to a hospital and show the label or packaging when possible.

• DO NOT LEAVE POISONED PERSON ALONE UNDER ANY CIRCUMSTANCE!

Ingestion (swallowing):

Wash out mouth with water. Do not induce vomiting. Seek medical advice immediately.

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, without rubbing. Remove and launder any contaminated clothing.

Eye contact:

In case of contact with eyes, remove contact lenses if present and rinse the eye slowly and gently with water for 15-20 minutes. Seek medical advice immediately.

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F KIII 9 WWW.

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

Difenacoum is an indirect anticoagulant. Vitamin K1 (phytomenadione) is an antidote.

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.

If less than 2 hours has passed from the intake, gastric emptying must be performed, and activated carbon dispensed (25 g). For comprehensive medical advice on the treatment of poisoning, contact the nearest Poisons Information Centre. National Poisons Information Service Tel: 0870 600 6266. Retain the label for reference.

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

See 4.2

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

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

Dangerous to aquatic organisms.

Avoid the product coming into contact with 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.

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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 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 original container under cool and dry conditions in a secure, well ventilated place, inaccessible to children, and away from foodstuffs and animal feedstuffs. 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 as a rodenticide.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Maximum Exposure:

Values related to the active ingredient Difenacoum Assessment Report (Directive 98/8 EC).

AOEL (acceptable operators' exposure limit) sub chronic and chronic 0.0011 mcg/kg bw/day.

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.
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

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: Purple liquid.

Odour: Odourless.

Odour threshold: Not applicable.

pH: 7

Melting point/Freezing point: No available data.

Initial boiling point and boiling range: No available data.

Flash point: No available data.

Evaporation rate: Not applicable.

Flammability: Not Flammable

Upper/Lower flammability of explosive limit: Not applicable.

Vapor pressure: Not applicable.
Vapor density: Not applicable.

Relative density: 1.06 g/ml

Solubility(ies): No available data.

Partition coefficient: No available data.

Auto-ignition temperature: Not applicable.

Decomposition temperature: No available data.

Viscosity: Not applicable.

Explosive properties: None.

Oxidising properties: Not fire propagating.

9.2. Other information

No available data.

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.

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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.

- b) irritation: no irritation potential expected. Information derived from the properties of the individual ingredients.
- c) corrosivity: no irritation potential expected. Information derived from the properties of the individual ingredients.
- d) sensitisation: contains no known skin or respiratory sensitizers.
- e) repeated dose toxicity: May cause damage to organs through prolonged or repeated exposure (Blood).
- f) carcinogenicity: Product does not contain any ingredients known to have such effects.
- g) mutagenicity: Product does not contain any ingredients known to have such effects.
- h) toxicity for reproduction: may damage fertility or cause harm to the unborn child. Information derived from the properties of the individual ingredients
- i) aspiration: No information.

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

Difenecoum is highly stable and hardly bio-degradable.

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.

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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

- a) Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2015/830).
- b) Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
- 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.

15.2. Chemical safety assessment

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

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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 Tox. 1 (Oral) H300 Fatal if swallowed.

Acute Tox. 1 (Dermal) H310 Fatal in contact with skin.

Acute Tox. 1(Inhalation) H330 Fatal if inhaled.

Repr. 1B H360D May damage the unborn child.

STOT RE 1 H372 Causes damage to organs through prolonged or

repeated exposure.

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

Acute Tox. 4 H302 Harmful if swallowed.
H332 Harmful if inhaled.
Skip krit. 2

Skin Irrit. 2 H315 Causes skin irritation. Eye Dam. 1 H318 Causes serious eye damage.

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

Issue number (date)	Section amended
Issue 1 (Dec 2017)	SDS was first produced.
Issue 2 (Jan 2020)	Update to style and layout – some updates to wording.

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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