

# BRODIFACOUM GRAIN

## Safety Data Sheet

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

Date of issue: 25/02/2019  
Version: 2.0

# Rentokil

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : BRODIFACOUM GRAIN  
Type of product : Biocide  
Registration No : UK-2017-1115-1-0004/ IE/BPA 70662-1-003  
Product group : Product

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

##### 1.2.1. Relevant identified uses

Main use category : Trained professional  
Use of the substance/mixture : A blue, ready-to-use, rodenticidal, whole-grain bait with no perceptible odour and a bittering agent. For use by professional operators for the control of rats and mice.  
Use of the substance/mixture : Rodenticide

##### 1.2.2. Uses advised against

No additional information available

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

##### Supplier

Rentokil Initial Supplies  
Liverpool  
L33 7SR  
UK

Product advice line: +44 (0)151 548 5050  
Email: sds@rentokil.com

##### National Contact

For UK:

Rentokil Initial Supplies  
Liverpool  
L33 7SR  
UK

For Ireland:

Rentokil Initial,  
Hazel House,  
Millennium Park,  
Naas, Co Kildare,  
Ireland

Tel: +353 (0)45 850 799

#### 1.4. Emergency telephone number

Emergency number : +44 (0)1342 833022

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Specific target organ toxicity — Repeated exposure, Category 2 H373

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

This product contains an anticoagulant compound. If large quantities are ingested, nosebleed and bleeding gums may occur. In severe cases there may be bruising, haematomas of the joints and blood present in the faeces and urine.

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) :

Warning

Hazardous ingredients :

Brodifacoum

Hazard statements (CLP) :

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

Precautionary statements (CLP) :

P260 - Do not breathe dust.  
P314 - Get medical advice/attention if you feel unwell.  
P501 - Dispose of contents/container to licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Whole wheat grain substance with a Community workplace exposure limit	(CAS-No.) - (EC-No.) -	>= 75	Not classified
Propane-1,2-diol substance with national workplace exposure limit(s) (GB, IE)	(CAS-No.) 57-55-6 (EC-No.) 200-338-0	2.5-5	Not classified
Brodifacoum	(CAS-No.) 56073-10-0 (EC-No.) 259-980-5 (EC Index-No.) 607-172-00-1	0.0025	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Repr. 1A, H360D STOT RE 1, H372 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
Brodifacoum	(CAS-No.) 56073-10-0 (EC-No.) 259-980-5 (EC Index-No.) 607-172-00-1	( 0.002 =<C < 0.02) STOT RE 2, H373 ( 0.003 =<C < 100) Repr. 1A, H360D ( 0.02 =<C < 100) STOT RE 1, H372

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects : If you feel unwell, seek medical advice. Causes damage to organs (blood).

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

Phytomenadione Vitamin K1 is antidotal.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.  
Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Explosion hazard : Product is not explosive.  
Reactivity in case of fire : On burning release of harmful/irritant gases/vapours e.g.: (carbon monoxide - carbon dioxide), and: formation of small quantities of (acrolein, formaldehyde).  
Hazardous decomposition products in case of fire : On burning: release of harmful/irritant gases/vapours.

#### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.  
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.  
Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Store away from other materials. Minimise generation of dust.

#### 6.4. Reference to other sections

Exposure controls/personal protection. See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use. Keep out of reach of children.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition. Direct sunlight.

#### 7.3. Specific end use(s)

Rodenticide.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Propane-1,2-diol (57-55-6)		
Ireland	Local name	Propane-1,2-diol
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	470 mg/m <sup>3</sup> total (vapour and particulates) 10 mg/m <sup>3</sup> particulates
Ireland	OEL (8 hours ref) (ppm)	150 ppm total (vapour and particulates)
United Kingdom	Local name	Propane-1,2-diol
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> particulates 474 mg/m <sup>3</sup> total vapour and particulates
United Kingdom	WEL TWA (ppm)	150 ppm total vapour and particulates
Whole wheat grain (-)		
EU	IOELV TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
EU	IOELV STEL (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup>

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### 8.2. Exposure controls

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Wear suitable gloves tested to EN374

#### Eye protection:

Not required for normal conditions of use

#### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

#### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Blue.
Odour	: Odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This product is stable under normal conditions of handling and use.

### 10.2. Chemical stability

This product is stable under normal conditions of handling and use. Not established.

### 10.3. Possibility of hazardous reactions

None expected under normal conditions of handling and use. Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

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### 10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

BRODIFACOUM GRAIN	
LD50 oral rat	> 2000 mg/kg

Brodifacoum (56073-10-0)	
LD50 oral rat	0.27 mg/kg
LD50 dermal rat	7.48 ml/kg

Skin corrosion/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-single exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-repeated exposure : May cause damage to organs (blood) through prolonged or repeated exposure.

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

Brodifacoum (56073-10-0)	
LC50 fish 1	0.042 mg/l 96hr Rainbow trout
EC50 Daphnia 1	0.25 mg/l 48hr
ErC50 (algae)	0.04 mg/l 72hr

### 12.2. Persistence and degradability

BRODIFACOUM GRAIN	
Persistence and degradability	Not readily biodegradable. Not established.

Whole wheat grain (-)	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

BRODIFACOUM GRAIN	
Bioaccumulative potential	This product is not expected to bioaccumulate. Not established.

Whole wheat grain (-)	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Additional information : Avoid release to the environment.

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- Product/Packaging disposal recommendations : This product is for amateur use and can be disposed of as normal household waste. However, if used in a place of work, any product and empty container must be disposed of as controlled waste.
- Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

#### 14.1. UN number

- UN-No. (ADR) : Not applicable  
UN-No. (IMDG) : Not applicable  
UN-No. (IATA) : Not applicable  
UN-No. (ADN) : Not applicable  
UN-No. (RID) : Not applicable

#### 14.2. UN proper shipping name

- Proper Shipping Name (ADR) : Not applicable  
Proper Shipping Name (IMDG) : Not applicable  
Proper Shipping Name (IATA) : Not applicable  
Proper Shipping Name (ADN) : Not applicable  
Proper Shipping Name (RID) : Not applicable

#### 14.3. Transport hazard class(es)

##### ADR

- Transport hazard class(es) (ADR) : Not applicable

##### IMDG

- Transport hazard class(es) (IMDG) : Not applicable

##### IATA

- Transport hazard class(es) (IATA) : Not applicable

##### ADN

- Transport hazard class(es) (ADN) : Not applicable

##### RID

- Transport hazard class(es) (RID) : Not applicable

#### 14.4. Packing group

- Packing group (ADR) : Not applicable  
Packing group (IMDG) : Not applicable  
Packing group (IATA) : Not applicable  
Packing group (ADN) : Not applicable  
Packing group (RID) : Not applicable

#### 14.5. Environmental hazards

- Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

#### 14.6. Special precautions for user

##### - Overland transport

Not applicable

##### - Transport by sea

Not applicable

##### - Air transport

Not applicable

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### - Inland waterway transport

Not applicable

### - Rail transport

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:

	Date of issue	Modified	
1.2	Main use category	Added	
4.2	Symptoms/effects	Modified	

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal), Category 1
Acute Tox. 1 (Inhalation)	Acute toxicity (inhal.), Category 1
Acute Tox. 1 (Oral)	Acute toxicity (oral), Category 1
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Repr. 1A	Reproductive toxicity, Category 1A
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H360D	May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

RI - SDS EU (REACH Annex II) CLP

### Before using any product, ensure that you read and understand its label.

The information contained in this safety data sheet is, to the best of our knowledge and belief, accurate and reliable at the time of publication. The information relates only to the specific material designated in this safety data sheet and may not be valid for such material if it is used in combination with any other material(s) or any other use than that specified herein. Neither Rentokil Initial plc nor any of its subsidiaries accepts any liability for the use of this product for any other purpose than that described in this safety data sheet. This does not affect your statutory rights. It is the user's responsibility to satisfy him/herself as to the suitability in completeness of such information for his/her own particular use.

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