

Safety data sheet
according to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulation
SI 2019/758, SI 2019/858 and SI 2019/1144

Printing date 23/10/2024

Version number 1

Revision: 23/10/2024

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

- 1.1 Product identifier

- Trade name: **BRODITEC G-29**

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

Ready for use rodenticide (biocidal product-PT14)

- 1.3 Details of the supplier of the safety data sheet

- GB Supplier:

Pelsis Ltd.
 Sterling House
 Grimbald Crag Close
 HG5 8PJ Knaresborough
 United Kingdom
 T +44 (0) 800 988 5359, F +44 (0) 1423 863 497
 info@pelsis.com

E-mail address of the competent person responsible for the SDS: info@pelsis.com

- Further information obtainable from: Pelsis Ltd.

- 1.4 Emergency telephone number:

+44 (0) 800 988 5359
 NHS In England and Wales: NHS 111 - dial 111
 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture

- Classification according to GB CLP

STOT RE 2 H373 May cause damage to the blood through prolonged or repeated exposure.

- 2.2 Label elements

- Labelling according to GB CLP

The product is classified and labelled according to the CLP regulation.

- Hazard pictograms



GHS08

- Signal word Warning

- Hazard-determining components of labelling:

brodifacoum

- Hazard statements

H373 May cause damage to the blood through prolonged or repeated exposure.

- Precautionary statements

P260 Do not breathe dust.
 P314 Get medical advice/attention if you feel unwell.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local regulation.

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- 2.3 Other hazards**- Results of PBT and vPvB assessment**

- PBT:	
56073-10-0 brodifacoum	
PBT	Brodifacoum fulfils the P, B and T criteria.
- vPvB:	
56073-10-0 brodifacoum	
vPvB	Brodifacoum fulfils the vP criterion.

- Determination of endocrine-disrupting properties

The mixture does not contain substances with endocrine disrupting properties in concentration equal to or greater than 0.1% by weight.

SECTION 3: Composition/information on ingredients**- 3.2 Mixtures**

- Description: Mixture of substances listed below with nonhazardous additions. EU registration/index numbers are provided here below.

- Dangerous components:		
CAS: 57-55-6 EINECS: 200-338-0 Reg.nr.: 01-2119456809-23	propane-1,2-diol substance with a workplace exposure limit	1-5%
CAS: 57-50-1 EINECS: 200-334-9	sucrose substance with a workplace exposure limit	≤1%
CAS: 128-37-0 EINECS: 204-881-4 Reg.nr.: 01-2119480433-40	2,6-di-tert-butyl-p-cresol (BHT) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	<0.1%
CAS: 9005-25-8 EINECS: 232-679-6	Starch substance with a workplace exposure limit	<0.1%
CAS: 56073-10-0 EINECS: 259-980-5 Index number: 607-172-00-1	brodifacoum Acute Tox. 1, H300 (ATE = 0.4 mg/kg bw); Acute Tox. 1, H310 (ATE = 3.16 mg/kg bw); Acute Tox. 1, H330 (ATE = 3.05 mg/m ³); Repr. 1A, H360D; STOT RE 1, H372; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10) Specific concentration limits: Repr. 1A; H360: C ≥ 0.003 % STOT RE 1; H372: C ≥ 0.02 % STOT RE 2; H373: 0.002 % ≤ C < 0.02 %	0.0029%

- Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures**- 4.1 Description of first aid measures**

- General information: Please refer to the instructions below for each specific way of exposure.

- After inhalation: Supply fresh air and to be sure call for a doctor.

- After skin contact:

Remove contaminated clothing. Wash skin with water and then with water and soap. If needed, seek for medical advice.

- After eye contact:

Rinse eyes with eye-rinse liquid or water, keep eyelids open at least 10 minutes. If needed, seek medical advice.

- After swallowing:

Rinse mouth carefully with water. Never give anything by mouth to unconscious person. Do not provoke vomiting. If swallowed, seek medical advice immediately and show the product's container or label.

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

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

This product contains an anticoagulant substance. 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.

Antidote: Vitamin K1 administered by medical/veterinary personnel only.

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

The primary treatment are the antidote therapy and the clinical assessment. Antidote: Vitamin K1 (phytomenadione). The effectiveness of the treatment should be monitored by measuring the clotting time. Do not interrupt the treatment until the clotting time is back to normality and is stable.

Consult a Poison Control Centre.

Antidote: Vitamin K1 administered by medical/veterinary personnel only.

UK medical professionals should contact the National Poisons Information Service (www.npis.org) for further advice.

SECTION 5: Firefighting measures**- 5.1 Extinguishing media**

- Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray.

- For safety reasons unsuitable extinguishing agents: To our knowledge, there are no unsuitable equipments.

- 5.2 Special hazards arising from the substance or mixture In case of fire, toxic gases may be generated.

- 5.3 Advice for firefighters Firefighters equipment in accordance with EN469 European standards.

- Protective equipment:

Do not inhale explosion gases or combustion gases.

Firefighters equipment in accordance with EN469 European standards.

- Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures**- 6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

After cleaning up, ensure adequate ventilation.

Dispose of the material collected according to regulations.

- 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage**- 7.1 Precautions for safe handling**

Wash hands and directly exposed skin after using the product.

Wear appropriate protective gloves.

When using the product, do not eat, drink or smoke.

Place the product out of the reach of children, birds, pets and farm animals and other non-target animals.

Place the product away from food, drink and animal feeding stuffs, as well as from utensils or surfaces that have contact with these. Do not smoke near the product.

- Information about fire - and explosion protection:

See Section 6.

See section 5.

- 7.2 Conditions for safe storage, including any incompatibilities**- Requirements to be met by storerooms and receptacles:**

Store in a dry, cool and well ventilated place. Keep the container closed and away from direct sunlight.

Store in places prevented from the access of children, birds, pets and farm animals.

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- Information about storage in one common storage facility:

Place the product away from food, drink and animal feeding stuffs, as well as from utensils or surfaces that have contact with these.

- Further information about storage conditions:

Protect from frost.

Protect from humidity and water.

- 7.3 Specific end use(s) This product is a rodenticide bait for rodents' control.**SECTION 8: Exposure controls/personal protection****- 8.1 Control parameters**

- Ingredients with limit values that require monitoring at the workplace:	
57-55-6 propane-1,2-diol	
WEL (Great Britain)	Long-term value: 10* 474** mg/m ³ , 150** ppm * Particulates; ** Total vapour & particulates
57-50-1 sucrose	
WEL (Great Britain)	Short-term value: 20 mg/m ³ Long-term value: 10 mg/m ³
128-37-0 2,6-di-tert-butyl-p-cresol (BHT)	
WEL (Great Britain)	Long-term value: 10 mg/m ³
9005-25-8 Starch	
WEL (Great Britain)	Long-term value: 10* 4** mg/m ³ *total inhalable **respirable

- Regulatory information WEL (Great Britain): EH40/2018

- DNELs		
57-55-6 propane-1,2-diol		
Inhalative	Long term - local effects	10 mg/m ³ (general population) 10 mg/m ³ (workers)
	Long term - systemic effects	50 mg/m ³ (general population) 168 mg/m ³ (workers)
128-37-0 2,6-di-tert-butyl-p-cresol (BHT)		
Oral	Long term - systemic effects	0.25 mg/kg bw/d (general population)
Dermal	Long term - systemic effects	0.25 mg/kg bw/d (general population) 0.5 mg/kg bw/d (workers)
	Long term - systemic effects	0.435 mg/m ³ (general population) 1.76 mg/m ³ (workers)

- PNECs

57-55-6 propane-1,2-diol		
PNEC	260 mg/l (fresh water)	
	183 mg/l (intermittent releases)	
	26 mg/l (marine water)	
	20000 mg/l (sewage treatment plant)	
	572 mg/kg dw (sediment (fresh water))	
PNEC	57.2 mg/kg dw (sediment (marine water))	
	50 mg/kg dw (soil)	
	128-37-0 2,6-di-tert-butyl-p-cresol (BHT)	
PNEC	0.000199 mg/l (fresh water)	
	0.00199 mg/l (intermittent releases)	
	0.00002 mg/l (marine water)	
	0.17 mg/l (sewage treatment plant)	
PNEC	0.458 mg/kg (sediment dw)	

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		0.046 mg/kg (sediment dw) 0.054 mg/kg (soil dw) 16.67 mg/kg ¹ (food)
56073-10-0 brodifacoum		
Oral	PNEC	0.0000128 mg/kg bw (bird) 0.000011 mg/kg bw (mammal)
	PNEC	0.00004 mg/l (aquatic organisms) >0.0038 mg/l (microorganisms)
	PNEC	>0.88 mg/kg ww (soil)
- Other exposure limit values		
56073-10-0 brodifacoum		
Oral	AEL - short term	0.0000033 mg/kg bw (AEL)
	AEL - medium term	0.00000667 mg/kg bw (AEL)
	AEL - long term	0.0000033 mg/kg bw (AEL)

- 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from food, drink and animal feedingstuffs.
Wash hands before breaks and at the end of work.
Do not eat, drink, smoke or sniff while working.
- **Respiratory protection:** Not required during normal use of the product.
- **Hand protection:**



Professional use: wear protective chemical resistant gloves (EN 374, category III) during product handling phase.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye/face protection:** Not required during normal use of the product.
- **Environmental exposure controls** See section 6.
- **Risk management measures** Follow the above-reported directions.

SECTION 9: Physical and chemical properties**- 9.1 Information on basic physical and chemical properties****- General Information**

- Physical state:	Solid
- Colour:	Red
- Odour:	Characteristic
- Odour threshold:	No data available.

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- Melting point/freezing point:	No data available.
- Boiling point or initial boiling point and boiling range	Not applicable (solid).
- Flammability	Not flammable
- Lower and upper explosion limits:	
Lower:	No data available.
Upper:	No data available.
- Flash point:	Not applicable (solid).
- Auto-ignition temperature:	Product is not selfigniting.
- Decomposition temperature:	No data available.
- pH:	6.61 (CIPAC MT 75.3 - 1% aq.)
- Viscosity:	
Kinematic viscosity:	Not applicable.
Dynamic viscosity:	Not applicable.
- Solubility	
water:	Insoluble.
- Partition coefficient: n-octanol/water (log value):	No data available.
- Vapour pressure:	Not applicable.
- Density and/or relative density:	
- Density:	1.188 g/ml (CIPAC MT 186)
- Relative density	No data available.
- Vapour density	Not applicable.
- Particle characteristics	See section 3.
- 9.2 Other information	
- Appearance:	
- Form:	Solid
- Information with regard to physical hazard classes	
- Explosives	Not explosive
- Flammable gases	Not applicable
- Aerosols	Not applicable
- Oxidising gases	Not applicable
- Gases under pressure	Not applicable
- Flammable liquids	Not applicable
- Flammable solids	Not flammable
- Self-reactive substances and mixtures	Not self-reactive
- Pyrophoric liquids	Not applicable
- Pyrophoric solids	Not pyrophoric
- Self-heating substances and mixtures	Not self-heating
- Substances and mixtures, which emit flammable gases in contact with water	Not applicable
- Oxidising liquids	Not applicable
- Oxidising solids	Not oxidising
- Organic peroxides	Not applicable

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- Corrosive to metals	Not applicable
- Desensitised explosives	Not applicable

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Under standard handling and storing conditions, the product does not show any dangerous reaction.
- **10.2 Chemical stability** Stable at room temperature and if used as recommended.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid**
Under standard handling and storing conditions, the product does not show any dangerous reaction.
- **10.5 Incompatible materials:**
Store only in original container.
Given the lack of information about possible incompatibilities with other substances, it is recommended not to use it in combination with other products.
- **10.6 Hazardous decomposition products:**
No dangerous decomposition products known under normal conditions of storage and use.

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SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

- **Acute toxicity** Based on available data, the classification criteria are not met.

- LD/LC50 values relevant for classification:

57-55-6 propane-1,2-diol		
Oral	LD50	22000 mg/kg bw (rat)
Dermal	LD50	>2000 mg/kg bw (rabbit)
Inhalative	LC50/2h	>317042 mg/m ³ (rabbit)
57-50-1 sucrose		
Oral	LD50	29700 mg/kg bw (rat)
128-37-0 2,6-di-tert-butyl-p-cresol (BHT)		
Oral	LD50	>2930 mg/kg bw (rat)
Dermal	LD50	>2000 mg/kg bw (rat) (OECD 402)
Inhalative	RD50	59.7 ppm (mouse) 30 min.
56073-10-0 brodifacoum		
Oral	LD50	0.4 mg/kg bw (male rat and mouse)
Dermal	LD50	3.16 mg/kg bw (rat)
Inhalative	LC50/4h	3.05 mg/m ³ (rat)

- Skin corrosion/irritation

57-55-6 propane-1,2-diol

skin irritation	Not irritating (OECD 404). Prolonged skin contact may cause temporary irritation.
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Based on available data, the classification criteria are not met.

- Serious eye damage/irritation

57-55-6 propane-1,2-diol

eye irritation	Not irritating (OECD 405). May cause temporary eye irritation.
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Based on available data, the classification criteria are not met.

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

- Additional toxicological information:

57-55-6 propane-1,2-diol

Inhalation	High concentrations of gases or vapours may irritate the respiratory tract.
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- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

- **Carcinogenicity** Based on available data, the classification criteria are not met.

- Reproductive toxicity

128-37-0 2,6-di-tert-butyl-p-cresol (BHT)

Oral	NOAEL - developmental toxicity	100 mg/kg bw/d (rat)
	NOAEL	500 mg/kg bw (rat)

56073-10-0 brodifacoum

developmental toxicity	Clear developmental toxicity was not observed in rabbits or rats. However, as a precaution, Brodifacoum should be considered teratogenic to humans because it contains the same chemical moiety responsible for the teratogenicity of warfarin, a known human teratogenic agent, and it has the same mode of action that is a known mechanism of teratogenicity in humans.
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Based on available data, the classification criteria are not met.

- **STOT-single exposure** Based on available data, the classification criteria are not met.**- STOT-repeated exposure****128-37-0 2,6-di-tert-butyl-p-cresol (BHT)**

Oral	NOAEL	25 mg/kg bw/d (rat) Long-term exposure to BHT can result in functional and histological changes of lung, liver, kidneys and thyroid. In case of chronic oral exposure, liver is the main target and thyroid is a indirect target. Doses above the NOAEL value result in thyroid iperactivity, enlargement of the liver, induction of several liver enzymes. Since the NOAEL derived from the chronic study is 25 mg/kg bw/d, the substance is not classified as "Specific target organ toxicity - repeated exposure".
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56073-10-0 brodifacoum

Oral	NOAEL	0.04 mg/kg bw/d (rat) The study reveals that repeated oral exposure results in toxic effects: prothrombin time prolongation, kaolin-caphalin time prolongation, haemorrhage. Based on the results of the acute dermal and inhalation toxicity studies and route-to-route extrapolation, it is justified to assume a similar concern for serious damage to health by prolonged exposure through dermal and inhalation routes also.
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May cause damage to the blood through prolonged or repeated exposure.

- **Aspiration hazard** Based on available data, the classification criteria are not met.- **Additional toxicological information:** No further relevant information available**- 11.2 Information on other hazards****- Endocrine disrupting properties**

The mixture does not contain substances with endocrine disrupting properties in concentration equal to or greater than 0.1% by weight.

SECTION 12: Ecological information**- 12.1 Toxicity****- Aquatic and/or terrestrial toxicity:****57-55-6 propane-1,2-diol**

EC50/96h	19000 mg/l (pseudokirchneriella subcapitata) 19100 mg/l (skeletonema costatum)
LC50/96h	40613 mg/l (oncorhynchus mykiss)
NOEC/18h	>20000 mg/l (pseudomonas putida)
NOEC/14d	15000 mg/l (pseudokirchneriella subcapitata) <5300 mg/l (skeletonema costatum)
NOEC/14d	15000 mg/kg (pseudokirchneriella subcapitata)
NOEC/7d	13020 mg/l (ceriodaphnia)
EC50/48h	18340 mg/l (ceriodaphnia dubia)

128-37-0 2,6-di-tert-butyl-p-cresol (BHT)

EC50/21d	0.096 mg/l (daphnia magna) (OECD 211)
EC50/3h	>10000 mg/l (activated sludge)
EC50/72h	>0.24 mg/l (pseudokirchneriella subcapitata) (OECD 201)
EC50/24h	1.7 mg/l (Tetrahymena pyriformis) Based on growth inhibition.
IC50/72h	>0.4 mg/l (desmodesmus subspicatus)
LC0/96h	≥0.57 mg/l (danio rerio)
LC50/96h	1.1 mg/l (oryzias latipes)
NOEC/30d	0.053 mg/l (oryzias latipes) (OECD 210)
LOEC/30d	0.14 mg/l (oryzias latipes) (OECD 210)
NOEC/21d	0.069 mg/l (daphnia magna) (OECD 211)
NOEC/72h	0.24 mg/l (pseudokirchneriella subcapitata)
EC50/48h	0.48 mg/l (daphnia magna) (OECD 202)

56073-10-0 brodifacoum

LC50/14d	(eisenia foetida) >994 mg/kg dry weight >879.6 mg/kg wet weight
ErC50/72h	0.04 mg/l (senastrum capricornutum)

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EC10/3h	>0.058 mg/l (activated sludge) Based on water solubility at pH 7 and T=20°C.
EC10/6h	>0.0038 mg/l (pseudomonas putida) Based on water solubility at pH 5.2 and T=20°C.
LC50/96h	0.042 mg/l (oncorhynchus mykiss)
LC50 (diet)	0.72 mg/kg food (laughing gull)
NOEC (reproductive toxicity)	0.0038 mg/kg food (bird)
NOEL (reproductive toxicity)	0.000385 mg/kg bw/d (bird)
LD50	0.31 mg/kg bw (mallard duck)
EC50/48h	0.25 mg/l (daphnia magna)
- 12.2 Persistence and degradability	
57-55-6 propane-1,2-diol	
biodegradability	81% (> 28 days; OECD 301F) 96% (64 days) Readily biodegradable.
128-37-0 2,6-di-tert-butyl-p-cresol (BHT)	
Biodegradation in water	4,5% (28 days, OECD 301C - Ready biodegradability: Modified MITI test). Not readily biodegradable.
56073-10-0 brodifacoum	
biodegradability	Not easily biodegradable. Brodifacoum will probably partition into sewage sludge/sediment due to its high log Kow and poor water solubility.
photolytic half-life	0.083 days. Degrades rapidly by photolysis.
Hydrolytic half-life	> 1 year. Stable at pH 5, 7 and 9.
- 12.3 Bioaccumulative potential	
57-55-6 propane-1,2-diol	
bioconcentration factor	BCF: < 0.09 The substance is not bioaccumulable.
octanol-water partition coefficient	Log Kow = -1.07
128-37-0 2,6-di-tert-butyl-p-cresol (BHT)	
bioaccumulation	An appreciable bioaccumulation potential is foreseeable.
56073-10-0 brodifacoum	
bioconcentration factor	BCF fish = 35645 (calculated according to TGD eq. 75, using log Kow = 6.12). BCF earthworm = 15820 (calculated according to TGD ed. 82d, using log Kow = 6.12).
octanol-water partition coefficient	log Kow = 6.12 (estimated from measured Koc).
- 12.4 Mobility in soil	
57-55-6 propane-1,2-diol	
Henry's law constant	0.00566 atm m ³ /mol (12°C)
56073-10-0 brodifacoum	
DT50	157 days. Persistent.
organic carbon partition coefficient	Koc = 9155 l/kg (pH 7,1-7.6). Immobile in soil.
soil mobility	Under basic conditions (high pH), Brodifacoum is not likely to be adsorbed onto soils or sewage sludge due to the ionisation of the molecule. Under acidic conditions (low pH), Brodifacoum is likely to be adsorbed onto soils or sewage sludge as the molecule is in its neutral or non-ionised form.

- General notes:

Hazardous to wildlife.

Do not allow the product to reach ground water, water course or sewage system.

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- 12.5 Results of PBT and vPvB assessment

- PBT:	
56073-10-0 brodifacoum	
PBT	Brodifacoum fulfils the P, B and T criteria.
- vPvB:	
56073-10-0 brodifacoum	
vPvB	Brodifacoum fulfils the vP criterion.
- 12.6 Endocrine disrupting properties	
The mixture does not contain substances with endocrine disrupting properties in concentration equal to or greater than 0.1% by weight.	
- 12.7 Other adverse effects	
56073-10-0 brodifacoum	
.	The major environmental concern of Brodifacoum is primary and secondary poisoning of non-target animals.

SECTION 13: Disposal considerations**- 13.1 Waste treatment methods****- Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system. At the end of the treatment, dispose of uneaten bait and the packaging in accordance with local requirements. In the UK waste bait should be double bagged in plastic bags and disposed of in a household waste bin with a secure lid to prevent access of wildlife or pets or taken to a civic amenity site. For information on civic amenity sites contact the local authority.

- Uncleaned packaging:

- Recommendation: Dispose of in accordance with local requirements.

SECTION 14: Transport information

- 14.1 UN-Number or ID number	
- ADR, ADN, IMDG, IATA	Not applicable
- 14.2 UN proper shipping name	
- ADR, ADN, IMDG, IATA	Not applicable
- 14.3 Transport hazard class(es)	
- ADR, ADN, IMDG, IATA	
- Class	Not applicable
- 14.4 Packing group	
- ADR, IMDG, IATA	Not applicable
- 14.5 Environmental hazards:	Not applicable.
- 14.6 Special precautions for user	Not applicable.
- 14.7 Maritime transport in bulk according to IMO instruments	
	Not applicable.
- UN "Model Regulation":	Not applicable

SECTION 15: Regulatory information**- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****- Directive 2012/18/EU**

- Named dangerous substances - ANNEX I None of the ingredients is listed.

- Seveso category This product is not subject to Seveso directive dispositions.

- REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)

The mixture does not contain substances identified as POP.

- LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)

The product does not contain any substance included in annex XIV.

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- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 30, 75
- **Regulation (EU) No 649/2012 (PIC)** There are no substances listed in this regulation.
- **REGULATION (EU) 2019/1148 - Explosive precursors**
The mixture does not contain explosives precursors in concentrations equal to or greater than 1%.
- **National regulations:** No further information available.
- **Other regulations, limitations and prohibitive regulations**
Authorisation holder: ARROW REGULATORY LIMITED - 149-155 CANAL STREET, NOTTINGHAM, NG1 7HR, UK
Authorisation n° GB-2015-0895-0002
- **Substances of very high concern (SVHC) according to REACH, Article 59**
The mixture does not contain SVHC substances in concentration equal to or greater than 0.1% by weight.
- **Regulation (EU) n. 2024/590: substances that deplete the ozone layer**
The mixture does not contain substances that deplete the ozone layer.
- **Regulation (EC) n. 850/2004: persistent organic pollutants** None.
- **15.2 Chemical safety assessment:**
A Chemical Safety Assessment according to Regulation (EC) No. 1907/2006 has not been carried out for the mixture.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Any responsibility derived from misuse of the product or in case of violation of current regulations is refused.

- Relevant phrases

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.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

- Classification according to Regulation (EC) No 1272/2008

Physico-chemical hazards: the classification of the mixture is based on the criteria established by annex I, part 2, of Regulation (EC) No. 1272/2008. If relevant, the methods are reported in section 9.
 Health and environmental hazards: the classification of the mixture is based on the calculation method stated in annex I, parts 3 and 4, of Regulation (CE) No. 1272/2008, using components data.

- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organisation
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
 NOELR: No Observed Effect Loading Rate
 RD50: Respiratory Decrease, 50 percent
 LC0: Lethal concentration, 0 percent
 NOEC: No Observed Effect Concentration
 IC50: Inhibitory concentration, 50 percent
 NOAEL: No Observed Adverse Effect Level
 EC50: Effective concentration, 50 percent
 EC10: Effective concentration, 10 percent
 AEC: Acceptable Exposure Concentration
 LL0: Lethal Load, 0 percent
 AEL: Acceptable Exposure Limit
 LL50: Lethal Load, 50 percent
 EL0: Effective Load, 0 percent
 EL50: Effective Load, 50 percent
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 SVHC: Substances of Very High Concern
 vPvB: very Persistent and very Bioaccumulative
 Acute Tox. 1: Acute toxicity - oral – Category 1
 Repr. 1A: Reproductive toxicity – Category 1A

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STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

- References

- Biocidal Products Committee (BPC) opinion June 2016 on the active substance;
- Assessment Report on the active substance (available at ECHA website);

- Sources

1. The E-Pesticide Manual 2.1 Version (2001)
2. Regulation (EC) 1907/2006 and following amendments
3. Regulation (EC) 1272/2008 and following amendments
4. Regulation (EU) 2020/878
5. Regulation (EU) 528/2012
6. Regulation (EC) 790/2009 (1st ATP CLP)
7. Regulation (EU) 286/2011 (2nd ATP CLP)
8. Regulation (EU) 618/2012 (3rd ATP CLP)
9. Regulation (EU) 487/2013 (4th ATP CLP)
10. Regulation (EU) 944/2013 (5th ATP CLP)
11. Regulation (EU) 605/2014 (6th ATP CLP)
12. Regulation (EU) 2015/1221 (7th ATP CLP)
13. Regulation (EU) 2016/918 (8th ATP CLP)
14. Regulation (EU) 2016/1179 (9th ATP CLP)
15. Regulation (EU) 2017/776 (10th ATP CLP)
16. Regulation (EU) 2018/669 (11th ATP CLP)
17. Regulation (EU) 2019/521 (12th ATP CLP)
18. Regulation (EU) 2018/1480 (13th ATP CLP)
19. Regulation (EU) 2020/217 (14th ATP CLP)
20. Regulation (EU) 2020/1182 (15th ATP CLP)
21. Regulation (EU) 2021/643 (16th ATP CLP)
22. Regulation (EU) 2021/849 (17th ATP CLP)
23. Directive 2012/18/EU (Seveso III)
24. ECHA web site