

Safety data sheet

according to EC Regulations No 1907/2006 (REACH) and No 453/2010

Printing date 01.05.2015

Revision: 01.05.2015

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

- 1.1 Product identifier

- Trade name: **MUSKIL BLOCK FLUO-NP**

- Sds code/version: 02/15

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

READY-TO-USE RODENTICIDE BLOCK BAIT (product type 14) FOR USE INDOORS AND OUTDOORS (AROUND BUILDINGS ONLY)

- Application of the substance / the mixture Rodenticide

- 1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

Zapi S.p.A.

Via Terza Strada, 12

35026 Conselve (Pd)

Italy

Tel. +39 049 9597737 Fax +39 049 9597735

customer.service@zapi.it - www.zapi.it

E-mail address of the competent person responsible for the SDS: techdept@zapi.it

Marketed by: J. V. Barrett & Co Ltd. St Ivel Way, Warmley. Bristol. UK. BS30 8TY. United Kingdom

www.barrettine.co.uk Tel: +44 (0) 1179 672222

- Further information obtainable from: Tech. dept.

- 1.4 Emergency telephone number:

Zapi customer service: tel. +39 049 9597737 (9:00-12:00/14:00-17:00)

NHS In England and Wales: NHS Direct - 0845 4647 or 111

In Scotland: NHS 24 - 08454 24 24 24

In Republic of Ireland: 01 809 2166

* SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture

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

The product is not classified according to the CLP regulation.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC

The product is not classified according to Directive 1999/45/EC

- Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- 2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008 Not applicable

- Hazard pictograms Not applicable

- Signal word Not applicable

- Hazard statements Not applicable

- Precautionary statements

P102 Keep out of reach of children.

P101 If medical advice is needed, have product container or label at hand.

P280 Wear protective gloves.

P270 Do not eat, drink or smoke when using this product.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P405 Store locked up.

- Additional information:

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction. EUH210 Safety data sheet available on request.

- Information concerning particular hazards for human and environment:

Prevent access to bait by children, birds and non-target animals (particularly dogs, cats, pigs and poultry). Baits must be securely deposited in a way so as to minimize the risk of consumption by other animals or children. Where possible,

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secure baits so that they cannot be dragged away. 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. For professional use: in the UK 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.environmentagency.gov.uk>) or SEPA (<http://www.sepa.org.uk>). For non-professional use: in the UK poisoned rodents should be double-bagged using plastic bags and either disposed of in a household waste bin with a secure lid to prevent access of wildlife or pets or collected by a specialist waste contractor or the local authority.

When the product is being used in public areas, 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. 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 evidences of resistance to specific active ingredients are suspected, avoid their use. To minimise the accumulation of rodent resistance to anticoagulants, it is advisable to alternate baits containing different anticoagulant active ingredients. Never place the product indiscriminately.

- 2.3 Other hazards**- Results of PBT and vPvB assessment****- PBT:** Not applicable.**- vPvB:** Not applicable.*** SECTION 3: Composition/information on ingredients****- 3.2 Chemical characterisation: Mixtures****- Description:** Mixture of substances listed below with nonhazardous additions.**- Dangerous components:**

CAS: 56073-07-5 EINECS: 259-978-4	difenacoum T+ R28; T R48/25; N R50/53 Acute Tox. 2, H300; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.0025%
CAS: 28772-56-7 EINECS: 249-205-9	bromadiolone T+ R26/27/28; T R48/23/24/25; N R50/53 Acute Tox. 1, H300; Acute Tox. 1, H310; Acute Tox. 1, H330; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.0025%

- Additional information: For the wording of the listed risk 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:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.**- After swallowing:**

Seek immediate medical advice.

Show the container, label or the safety data sheet of the product.

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

No further relevant information available.

- Information for doctor:

Difenacoum and bromadiolone are anticoagulants which may produce bleeding; the onset of bleeding may be delayed for several days after exposure. If there is no active bleeding the INR (prothrombin time) should be measured

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on presentation and 48-72 hours after exposure. If the INR is greater than 4, administer Vitamin K1 (phytomenadione) 5-10 mg by slow intravenous injection (100 µg/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

Vitamin K1 (under medical supervision). 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.

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

- 5.3 Advice for firefighters In case of fire, toxic gases may be generated.

- Protective equipment: Do not inhale explosion gases or combustion gases.

- 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.

Dispose of the material collected according to regulations.

After cleaning up, supply sufficient ventilation.

- 6.4 Reference to other sections

No dangerous substances are released.

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

Wear appropriate protective gloves

Store in a fresh and dry place and in closed containers.

Do not smoke near the product.

Keep away from heat and direct sunlight.

- Information about fire - and explosion protection: See Section 6.

- 7.2 Conditions for safe storage, including any incompatibilities

- Storage:

- Requirements to be met by storerooms and receptacles:

Store in a cool location.

Store only in original container.

- Information about storage in one common storage facility:

Store away from foodstuffs.

When handling the product, do not contaminate food, drinks or containers meant to contain them.

- Further information about storage conditions:

Protect from frost.

Protect from humidity and water.

Store in a fresh and dry place and in closed containers.

Protect from heat and direct sunlight.

Pay attention when re-opening containers already open.

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- **7.3 Specific end use(s)** No further relevant information available.

* SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.- **8.1 Control parameters**- **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Additional information:** The lists valid during the making were used as basis.- **8.2 Exposure controls**- **Personal protective equipment:**- **General protective and hygienic measures:**Do not eat, drink, smoke or sniff while working.
Keep away from food, drink and animal feedingstuffs.
Wash hands before breaks and at the end of work.- **Respiratory protection:** Not required.- **Protection of hands:**

Protective gloves

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
Wear protective gloves.

- **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 protection:** Not required.

* SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**- **General Information**- **Appearance:**

Form:	Solid
Colour:	Fluorescent red

- **Odour:** Characteristic- **Odour threshold:** Not determined.- **pH-value:** 6.54 (1% aqu. sol. CIPAC MT75.3)- **Change in condition**

Melting point/Melting range:	Not applicable
Boiling point/Boiling range:	Not applicable.

- **Flash point:** Not flammable- **Flammability (solid, gaseous):** Not determined.

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- Ignition temperature:	
Decomposition temperature:	Not determined.
- Self-igniting:	Product is not selfigniting.
- Danger of explosion:	Product does not present an explosion hazard.
- Vapour pressure:	Not applicable.
- Density:	1.106 g/ml (CIPAC MT33)
- Relative density	Not determined.
- Vapour density	Not applicable.
- Evaporation rate	Not applicable.
- Solubility in / Miscibility with water:	Insoluble.
- Partition coefficient (n-octanol/water):	Not determined.
- Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
- Solvent content:	
Organic solvents:	0.3 %
- 9.2 Other information	No further relevant information available.

* 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**
- **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** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

* SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- LD/LC50 values relevant for classification:		
28772-56-7 bromadiolone		
Oral	LD50	1.125 mg/kg (rat)
Dermal	LD50	1.71 mg/kg (rabbit)
Inhalative	LC50/4h	0.00043 mg/l (rat)
56073-07-5 difenacoum		
Oral	LD50	1.8 mg/kg (rat) male rat
Dermal	LD50	2 mg/kg (rabbit) 1000 mg/kg (rabbit)
PRODUCT		
Oral	LD50	> 2500 mg/kg (rat) (OECD 423)
Dermal	ld50	> 2000 mg/kg (rat) (OECD 402)

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- Primary irritant effect:**- on the skin:**Non-irritant
(OECD 404-rabbit)**- on the eye:**Non-irritant
(OECD 405-rabbit)**- Sensitisation:**Non-sensitiser
(OECD 429-mouse)**- Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

*** SECTION 12: Ecological information****- 12.1 Toxicity****- Aquatic toxicity:****28772-56-7 bromadiolone**

LC50/96h	3.0 mg/l (bluegill sunfish)
	1.4 mg/l (rainbow trout)

56073-07-5 difenacoum

LC50/96h	0.10 mg/l (rainbow trout)
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- 12.2 Persistence and degradability No further relevant information available.**- 12.3 Bioaccumulative potential** No further relevant information available.**- 12.4 Mobility in soil** No further relevant information available.**- Ecotoxicological effects:****- Other information:****28772-56-7 bromadiolone**

Oral	LD50	138 mg/kg (bobwhite quail)
	LC50	>1000 mg/kg (worm)

56073-07-5 difenacoum

Oral	LD50	>50 mg/kg (chicken)
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- Additional ecological information:**- General notes:**

Not known to be hazardous to water.

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

- 12.5 Results of PBT and vPvB assessment**- PBT:** Not applicable.**- vPvB:** Not applicable.**- 12.6 Other adverse effects** No further relevant information available.*** 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.

Dispose of in accordance with local requirements.

Remove all baits after treatment and dispose of them in accordance with local requirements.

For professional use: for information on disposal in the UK contact the Environment Agency (<http://www.environment-agency.gov.uk>) or SEPA (<http://www.sepa.org.uk>).

For non-professional use: In the UK waste bait should be double bagged in plastic bags and disposed of in a

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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:** Disposal must be made according to official regulations.

* SECTION 14: Transport information	
- 14.1 UN-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: - Marine pollutant:	No
- 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.
- UN "Model Regulation":	-

* SECTION 15: Regulatory information	
- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
- Chemical safety assessment For an appropriate use of the product, follow the indications mentioned in the label.	
- National regulations:	
- Additional classification according to Decree on Hazardous Materials, Annex II:	
Authorisation holder ZAPI S.p.A. Via Terza Strada, 12 35026 Conselve (PD) Italy	
Authorisation n° UK-2013-0757 - Date of the authorisation: 06/08/2013 - Expiry date of the authorisation: 31/08/2020	
Product type: 14-Rodenticide	

* 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.	
- Relevant phrases	
H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
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.
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.
R28	Very toxic if swallowed.
R48/23/24/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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- 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)
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Acute Tox. 1: Acute toxicity, Hazard Category 1
Acute Tox. 2: Acute toxicity, Hazard Category 2
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard 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

- Sources

1. 1999/45/EC Directive, 2006/8/EC Directive and following amendments
2. 67/548/EEC Directive and following amendments
3. 91/155/EEC Directive and following amendments
4. The Merck Index Ed. 10
5. The E-Pesticide Manual 2.1 Version (2001)
6. Regulation (EC) No. 1907/2006 and following amendments

- * Data compared to the previous version altered.