SAFETY DATA SHEET **RASCAL BROMADIOLONE PASTA BAIT**

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of	the substance/mixture and of the company/undertaking
1.1. Product identifier	
Product name	RASCAL BROMADIOLONE PASTA BAIT
1.2. Relevant identified uses	of the substance or mixture and uses advised against
Identified uses	Ready for use Rodenticide containing 50ppm Bromadiolone.
Uses advised against	No specific uses advised against are identified.
1.3. Details of the supplier of	the safety data sheet
Supplier	1ENV SOLUTIONS LTD Unit 4 Airbourne Industrial Estate Arterial Road Leigh on Sea Essex SS9 4EX United Kingdom 01702 617057
1.4. Emergency telephone nu	umber
Emergency telephone	01702 617057
SECTION 2: Hazards identifi	cation
2.1. Classification of the subs	stance or mixture
Classification (EC 1272/2008	-
Physical hazards	Not Classified
Health hazards	Repr. 1B - H360D STOT RE 1 - H372
Environmental hazards	Not Classified
2.2. Label elements	
Pictogram	
Signal word	Danger
Hazard statements	H360D May damage the unborn child. H372 Causes 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. P280 Wear protective gloves. 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 national regulations.
2.3. Other hazards	

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients		
3.2. Mixtures		
2,2'-Iminodiethanol		<0.1%
CAS number: 111-42-2	EC number: 203-868-0	
Classification		
Acute Tox. 4 - H302		
Skin Irrit. 2 - H315		
Eye Dam. 1 - H318		
STOT RE 2 - H373		
BROMADIOLONE (EU)		0.005%
CAS number: 28772-56-7	EC number: 249-205-9	
M factor (Acute) = 1	M factor (Chronic) = 1	
Classification		
Acute Tox. 1 - H300		
Acute Tox. 1 - H310		
Acute Tox. 1 - H330		
Repr. 1B - H360D		
STOT RE 1 - H372		
Aquatic Acute 1 - H400		
Aquatic Chronic 1 - H410		
Denatonium Benzoate		0.001%
CAS number: 3734-33-6	EC number: 223-095-2	
Classification		
Acute Tox. 4 - H332		
Skin Irrit. 2 - H315		
Eye Dam. 1 - H318		
Aquatic Chronic 3 - H412		

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Advice for Medical Doctors: Bromadiolone is an indirect anti-coagulant. Phytomenadione, Vitamin K, is antidotal. Determin prothrombin time not less than 18 hours after consumption. If elevated, administer Vitamin K1 until prothrombin time normalises. Continue determination of prothrombin time for two weeks after withdrawal of antidote and resume treatment if elevation occurs in that time.
Inhalation	Due to the physical nature of this product, exposure by this route is unlikely. IF INHALED: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if symptoms are severe or persist.

Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention immediately.
Skin contact	May cause irritation to susceptible persons. Immediately take off all contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if symptoms are severe or persist after washing.
Eye contact	May cause eye irritation to susceptible persons. Rinse immediately with plenty of water and seek medical advice.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.
4.2. Most important symptoms	and effects, both acute and delayed
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Unlikely to present an inhalation hazard. If symptoms develop move the exposed person to fresh air. Immediately obtain medical advice.
Ingestion	Rinse mouth. Do NOT induce vomiting. Call a doctor immediately.
Skin contact	May cause irritation.
Eye contact	May be slightly irritating to eyes.
4.3. Indication of any immedia	te medical attention and special treatment needed
Notes for the doctor	Treat symptomatically.
SECTION 5: Firefighting meas	sures
SECTION 5: Firefighting meas 5.1. Extinguishing media	sures
	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
5.1. Extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry
5.1. Extinguishing media Suitable extinguishing media Unsuitable extinguishing	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire.
5.1. Extinguishing media Suitable extinguishing media Unsuitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire.
5.1. Extinguishing media Suitable extinguishing media Unsuitable extinguishing media 5.2. Special hazards arising fre	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire.
5.1. Extinguishing media Suitable extinguishing media Unsuitable extinguishing media 5.2. Special hazards arising fro Specific hazards Hazardous combustion	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire. om the substance or mixture None known. Thermal decomposition or combustion products may include the following substances:
5.1. Extinguishing media Suitable extinguishing media Unsuitable extinguishing media 5.2. Special hazards arising fro Specific hazards Hazardous combustion products	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire. om the substance or mixture None known. Thermal decomposition or combustion products may include the following substances:
 <u>5.1. Extinguishing media</u> Suitable extinguishing media Unsuitable extinguishing media <u>5.2. Special hazards arising fro</u> Specific hazards Hazardous combustion products <u>5.3. Advice for firefighters</u> Protective actions during 	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire. om the substance or mixture None known. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers
 5.1. Extinguishing media Suitable extinguishing media Unsuitable extinguishing media 5.2. Special hazards arising from Specific hazards Hazardous combustion products 5.3. Advice for firefighters Protective actions during firefighting Special protective equipment 	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire. om the substance or mixture None known. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.		
6.4. Reference to other section			
Reference to other sections	For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.		
SECTION 7: Handling and stor	rage		
7.1. Precautions for safe hand	ling		
Usage precautions	As the product is a paste it is unlikely to produce dust. Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use.		
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Wash after use and before eating, smoking and using the toilet.		
7.2. Conditions for safe storage	e, including any incompatibilities		
Storage precautions	Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Protect containers from damage. Keep away from oxidising materials, heat and flames.		
Storage class	Unspecified storage.		
7.3. Specific end use(s)			
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.		
Usage description	Ready to use rodenticide containing 50 ppm Bromadiolone.		
SECTION 8: Exposure Control	s/personal protection		
8.1. Control parameters			
Occupational exposure limits			
Propane-1,2-diol (Propane-1,2-diol Particulates) WEL 8-Hr limit mg/M3: 10 Propane-1,2-diol (Propane-1,2-diol total vapour and particulates) WEL 8-Hr limit ppm: 150 WEL 8Hr limit mg/M3: 474			
Flour WEL 8-Hr limit mg/M3:	10 WEL 15 min limit mg/M3: 30		
8.2. Exposure controls			
Appropriate engineering controls	Provide adequate ventilation.		
Personal protection	Keep away from food stuffs.		
Eye/face protection	Avoid contact with eyes.		
Hand protection	Suitable chemical resistant gloves are recommended for professional users.		
Other skin and body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved.		

Hygiene measures	Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.
Respiratory protection	Provide adequate ventilation.
Environmental exposure controls	Keep container tightly sealed when not in use. Avoid release to the environment.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physi	ical and chemical properties		
Appearance	Paste.		
Colour	Red or Blue		
Odour	Characteristic.		
Odour threshold	No information available.		
рН	No information available.		
Melting point	Not relevant.		
Initial boiling point and range	No information available.		
Flash point	No information available.		
Evaporation rate	No information available.		
Evaporation factor	No information available.		
Flammability (solid, gas)	combustible		
Upper/lower flammability or explosive limits	No information available.		
Other flammability	No information available.		
Vapour pressure	Not relevant.		
Vapour density	Not relevant.		
Relative density	No information available.		
Bulk density	No information available.		
Solubility(ies)	No information available.		
Partition coefficient	Not relevant.		
Auto-ignition temperature	No information available.		
Decomposition Temperature	No information available.		
Viscosity	No information available.		
Explosive properties	Not considered to be explosive.		
Explosive under the influence of a flame	Not considered to be explosive.		
Oxidising properties	Not oxidising.		
9.2. Other information			
SECTION 10: Stability and reactivity			

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
10.3. Possibility of hazardous	reactions
Possibility of hazardous reactions	No potentially hazardous reactions known.
10.4. Conditions to avoid	
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
10.5. Incompatible materials	
Materials to avoid	Keep away from oxidising materials, heat and flames.
10.6. Hazardous decompositio	n products
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.
SECTION 11: Toxicological inf	ormation
11.1. Information on toxicologic	cal effects
Acute toxicity - oral Notes (oral LD₅₀)	>2000 mg/kg
Acute toxicity - dermal Notes (dermal LD50)	>2000 mg/kg
Acute toxicity - inhalation Notes (inhalation LC_{50})	>5 mg/l (Dust)
Skin corrosion/irritation Animal data	Based on available data the classification criteria are not met.
Serious eye damage/irritation Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	May damage the unborn child.

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Specific target organ toxicity - STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.	
Specific target organ toxicity -	repeated exposure	
STOT - repeated exposure	STOT RE 1 - H372 Causes damage to organs through prolonged or repeated exposure.	
Aspiration hazard Aspiration hazard	Not relevant. Solid.	
General information	Avoid contact during pregnancy/while nursing. May damage fertility. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Inhalation	No specific symptoms known.	
Ingestion	See section 4 - First Aid	
Skin contact	Prolonged contact may cause dryness of the skin.	
Eye contact	No specific symptoms known.	
Route of exposure	Ingestion Inhalation Skin and/or eye contact	
Toxicity of ingredients	Denatonium Benzoate Oral (Rat) LD50 = 584 mg/kg Bromadiolone Acute Oral ≤5mg/kg Acute Dermal ≤50mg/kg Acute Inhalation ≤0.05mg/kg (Commission Regulation 2016/1179)	
SECTION 12: Ecological Infor	mation	
Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.	
12.1. Toxicity		
Toxicity	Based on available data the classification criteria are not met.	
12.2. Persistence and degrada	ability	
Persistence and degradability	The degradability of the product is not known.	
12.3. Bioaccumulative potentia	al	
Bioaccumulative potential	No data available on bioaccumulation.	
Partition coefficient	Not relevant.	
12.4. Mobility in soil		
Mobility	No data available.	
12.5. Results of PBT and vPv	3 assessment	
12.6. Other adverse effects		
Other adverse effects	Toxic to mammals, including domesticated animals and birds if ingested. Exposure of non- target animals should be prevented.	
Toxicity of ingredients	Bromadiolone Daphnia EC50/48Hr = 5.79 mg/l Rainbow trout LC50/96Hr = 2.89 mg/l	
SECTION 13: Disposal consid	erations	
13.1. Waste treatment method	<u>ls</u>	
General information	This material and its container must be disposed of in a safe way.	
Disposal methods	Dispose of in accordance with applicable regional, national, and local laws and regulations.	

Dispose of Contaminated packaging as unused product unless fully cleaned.

Waste class	Waste disposal key number from EWC is 20 01 19 (Pesticides)
SECTION 14: Transport inform	nation
General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
14.1. UN number	
Not applicable.	
14.2. UN proper shipping nam	e
Not applicable.	
14.3. Transport hazard class(e	as)
No transport warning sign requ	uired.
14.4. Packing group	
Not applicable.	
14.5. Environmental hazards	
Environmentally hazardous su No.	bstance/marine pollutant
14.6. Special precautions for u	Iser
Not applicable.	
14.7. Transport in bulk accord	ing to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
SECTION 15: Regulatory infor	mation
15.1. Safety, health and enviro	onmental regulations/legislation specific for the substance or mixture
National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. 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 (as

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC₅₀: Lethal Concentration to 50 % of a test population. LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose). EC₅₀: 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
Classification abbreviations and acronyms	Repr. = Reproductive toxicity STOT RE = Specific target organ toxicity-repeated exposure
Classification procedures according to Regulation (EC) 1272/2008	STOT RE 1 - H372: Commission Regulation (EU) 2016/1179 Repr. 1B - H360D: Commission Regulation (EU) 2016/1179
Revision date	06/12/2017
Revision	9
Supersedes date	22/06/2017
SDS number	21333
Hazard statements in full	 H300 Fatal if swallowed. H302 Harmful if swallowed. H310 Fatal in contact with skin. H315 Causes skin irritation. H318 Causes serious eye damage. H330 Fatal if inhaled. H332 Harmful if inhaled. H360D May damage the unborn child. H372 Causes damage to organs (Blood) 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. H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.