Development, Production, and Marketing of advanced pest control solutions
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MATERIAL SAFETY DATA SHEET - PASTION PASTA PLUS

In accordance with Regulation (EC) 1907/2006, (EC) 1272/2008 and (EU) 453/2010 (Annex I)

SECTION 1.
IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1. Mixture identifier

Mixture name:	**Pastion Pasta Plus**

1.2. Relevant identified uses of the mixture and uses advised against

Relevant use(s)	Rodenticide
Uses advised against	Other uses are not expected.

1.3. Details of the supplier of the safety data sheet

Distributor RPC Ltd.
P.O.BOX 128 – NES HARIM
Tel. 1-700-500-405

1.4. Emergency telephone number

Tel. RPC Pest Control Co. Ltd. 1-700-500-405
Tel. Anti poison center Harambam Hospital +972-48541900

SECTION 2
HAZARDS IDENTIFICATION

2.1 Classification of the mixture

- **Classification of the mixture in accordance with Directive 1999/45/EEC : NOT CLASSIFIED**

Main adverse effects
Physico-chemical effects Not foreseen
Health effects Ingestion: May cause adverse effects if swallowed.
Contact with skin: May cause irritation.
Contact with eyes: May cause irritation.
Environmental effects Might cause adverse effects for the environment.
See also sections from 9 to 12

2.2 Label elements

- **Labelling in accordance with Directive 1999/45/EEC**

Hazards symbols	None
Risk phrases (R)[1]	None
Safety phrases (S) [1]	**S2, S13, S24, S36/37, S35, S46**

[1] For the explanation of R and S phrases: see Section 16

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- **Labelling in accordance with regulation n. 1272/2008/EC**

Pictograms	None
Signal Word	None
Hazard indication (H))[1]	None
Safety statements (P)[1]	**P102**
- *Prevention*	**P270, P262, P280**
- *Reaction*	**P301 + P310**
- *Storage*	-
- *Disposal*	**P501**

[1] For the explanation of H and P statements: see Section 16

2.3 Other hazards (which do not results in the classification)

The mixture satisfy the PBT criteria	YES	NO
- PBT		X
- vPvB		X

- Health hazards: There are no other hazards to humans.
- Environmental hazards: There are no other environmental hazards.
- Physico-chemical hazards: Substance can emit toxic fumes in case of fire.
- Specific effects: There are no other specific effects.

SECTION 3
COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

Name	EINECS/ ELINCS Number	CAS n.	Conc. % (w/w)	Classification (67/548/CEE)	Classification (1272/2008/EC)	Occupation Exposure Limits
Brodifacoum (Index n° 607-172-00-1)	259-980-5	56073-10-0	< 0.01	T+; R27/28 T; R48/24/25 N; R50-53	Acute Tox. 1, H310 Acute Tox. 2 *, H300 STOT RE 1, H372** Aquatic Acute 1, H400 Aquatic Chronic 1, H410	
Denatonium benzoate	223-095-2	3734-33-6	< 0.01	Xn; R22	Acute tox. 4, H302	

SECTION 4
FIRST AID MEASURES

4.1 Description of the first aid measures

- *Eye contact*: Wash immediately with large amounts of water or normal saline. Keep eyelid open with the finger. Get medical advice if adverse symptoms appear and show this safety data sheet.
- *Skin contact*: Remove contaminated clothes and shoes immediately. Wash affected area with soap or mild detergent and large amount of water until no evidence of substance remains (15-20 minutes). Get medical advice if adverse symptoms appear and show this safety data sheet. Do not use solvents or thinners.
- *Ingestion*: If swallowed and if victim is conscious and alert wash mouth with water. Treat symptomatically and supportively. Get medical advice if adverse symptoms appear and show this safety data sheet.
- *Inhalation*: The inhalation of the product is an unlikely event due to the physic-chemical properties of the product.

4.2 Most important symptoms and effects (acute and delayed)

- *Acute effects*	INHALATION: The inhalation of the product is an unlikely event , if it occurs may cause cough, sore throat. SKIN: May cause redness and irritation. EYES: May cause redness, stinging sensation and irritation. INGESTION: Characteristic taste. May cause negative effects if swallowed. Mixture acts as an anticoagulant. The active ingredient (Brodifacoum) is very toxic if absorbed.
- *Delayed effects:*	Delayed effects and symptoms related to this mixture are not foreseen.

4.3 Indication of any immediate medical attention and special treatment needed

- *Medical monitoring:*	To be undertaken in case of delayed effects known.
- *Antidotes, if known*	Unknown.
- *Contraindications*	Unknown.
- *Immediate treatment at workplace*	SKIN : Rinse and the wash skin with water and soap. EYES: First rinse with plenty of water for several minutes then take to a doctor. INGESTION: Rinse mouth. Refer for medical attention.

SECTION 5
FIREFIGHTING MEASURES

5.1 Extinguishing media

- *Suitable estinguishing media*	Water mist or spray, regular foam, CO_2, dry powder.
- *Unsuitable estinguishing media*	Unknown

5.2 Special hazards arising from the mixture

- *Hazardous combustion products*	May produce toxic fumes of CO_X, NO_X, HBr, SO_X,
- *Other special hazards*	Special hazards related to this substance are not known.

5.3 Advice for firefighters

- *Technical actions for protection*	Water jets can be used successfully to cool containers exposed to the fire and disperse fumes.
- *Special protective equipment for firefighters*	Wear boots, overalls, gloves, eye and face protection and breathing apparatus. Equipment must conform with EN standard and used in highest condition of protection on the basis of the information reported in the previous sub-sections.

SECTION 6
ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Ventilate areas. Remove all sources of ignition and heat.

For emergency responders:

Wear appropriate protective equipment (see Section 8) to minimize exposure to the product.

6.2 Environmental precautions

In case of accidental release in the environment prevent the substance from reaching drains, surface water and ground water.

6.3 Methods and material for containment and clearing up

- *Containment procedures:* Collect all of the material scattered on the ground with suitable protective equipment and put it in a clean and dry container.
Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8.
- *Cleaning up procedures:* Recover the substance by scooping up or vacuum, or with other suitable mechanical means and wash the area with plenty of water. Store the recovered product until it can be disposed of in accordance with all regulations and at a properly accredited facility.
If the spill happened on a highway, or in a public place, take all measures necessary in order to protect people from any risk.

6.4 Reference to other sections

See also section 8 and 13.

SECTION 7
HANDLING AND STORAGE

7.1. Precautions for safe handling

- *Recommendation for handling:* Handle away from sparks and flames and all sources of ignition.
Handle in a well ventilated place. Suitable containment system must be adopted to prevent dispersion of vapour that could be released during handling.
Avoid contact with incompatible materials.
Wear suitable Personal Protection Equipment (see Section 8).
Keep the mixture away from drains, surface or ground waters.
- *Recommendation for personal hygiene:* Do not eat, drink and smoke in the working areas.
Wash hands after handling the mixture.
Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Condition for safe storage including any incompatibilities

The risk management procedures described in this section are consistent with the physical and chemical properties reported in section 9.
The mixture is not classified for any physical and chemical properties and no risk management is foreseen.

Risk Management measures related to:
- *Evaporative conditions:* Keep containers tightly closed and labelled with the name of the product.
Containers of this material may be hazardous when empty since they retain product residues (vapours, liquids).
- *Potential ignition sources:* Don't expose to heat sources.
Store separately from reactive or combustible materials.

Procedure to control other effects
- *Weather conditions:* Don't expose to high temperatures.
- *Ambient pressure:* No restrictive procedure expected.
- *Temperature* Store at room temperature. Avoid exposure at temperatures >35°C.
- *Sunlight:* Avoid light and sunlight exposure.
- *Humidity:* Avoid humidity exposure

The adoption of the Risk Management procedure related to the physical and chemical properties is also based on the local Risk Assessment done by the employer in its workplace conditions (use of the mixture), particularly when a standardized exposure scenario is not available (ingredients in the mixture are not yet REACH registered).

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Material to keep the integrity of the mixture

- *Stabilisers:* Not involving the use of stabilizers.
- *Antioxidants:* Not involving the use of antioxidants.

Other advice

- *Ventilation requirements* Request based on the storage of the mixture.
- *Specific design of storage rooms* Not required on the basis of the classification.
- *Quantity limits for storage* Not required on the basis of the classification.
- *Packaging compatibilities* See also 10.5.

7.3. Specific end use(s)

- Recommendation for specific final use(s)

	YES	NO
- Exposure scenario attached		X
- Chemical Safety Assessment (CSA) attached		X
- Industry or sector specific guidance available and attached		X

SECTION 8
EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

- National/European Occupational Exposure Limits: Not established
- Other Occupational Exposure Limits: Not established
- National/European Biological Limits (BEI): Not established
- Other National/European Biological Limits (BEI): Not established
- Recommended monitoring procedures: The measurements of the substance/s in the workplace must be carried out in accordance with standardized methods described by EN standard.

Denatonium benzoate: COND: C18 column; 40% methanol 60% water 0.1% H3PO4; 1 mL/min; UV det: 254; Anal retention time, 15 min; DL 10µg/sample; C/P WEB 9/81. MEDIA: Glass Fiber Filter. ANL: High performance liquid chromatography; HPLC/U . REF: 2 (OSHA In-house File). CLASS: Not Validated (OSHA – Chemical Sampling Information)

- DNEL values (components): Chemical Safety Report has not been compiled.
- PNEC values (components):

PNEC for aquatic organism = 0.00004 mg/l**,** related to Brodifacoum (3)
PNEC for sediment organisms = 0.000004 mg/l, related to Brodifacoum (3)
PNEC for STP microorganisms > 0.0038 mg/l, related to Brodifacoum (3)
PNECsoil > 0.88 mg/kg wwt, related to Brodifacoum (3)
PNEC oral bird = 1.28E-05 mg/kg bw/d, related to Brodifacoum (3)
PNEC oral, mammals = 3.33E-06 mg/kg bw, related to Brodifacoum (3)

8.2. Exposure controls

	YES	NO
- Exposure scenario attached		X
- Chemical Safety Assessment (CSA) attached		X

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8.2.1. Appropriate engineering controls

The adoption of the most appropriate engineering controls is also based on the local Risk Assessment done by the employer in its workplace conditions (use of the mixture), particularly when a standardized exposure scenario is not available (ingredients in the mixture are not yet REACH registered)

8.2.2. Individual **protection** *measures, such as Personal Protective Equipment (PPE)*

The adoption of the most appropriate Personal Protective Equipment is also based on the local Risk Assessment done by the employer in its workplace conditions (use of the mixture), particularly when a standardized exposure scenario is not available (ingredients in the mixture are not yet REACH registered).
If the results of such risk evaluation done in accordance with Directive 98/24/EEC showed that the collective and general risk management measures are not sufficient to reduce the risks and, if the exposure to the mixture cannot be reduce by other containment means, appropriate PPE must be adopted in compliance with technical EN guidance indication.

a) Eye and Face protection	Safety goggles as for EN 166; facial shield or mask with approved filter.
b) Skin protection	
- hands protection	Gloves resistant to chemical agents as for the EN 374, parts 1, 2 and 3 and the European Directive 89/89/CEE (classified substances). The gloves material must be waterproof and stable against the mixture content. Use Polyvinyl alcohol or nitrile rubber gloves.
- other, body protection	Select the suitable protective equipment based on the activity of use and possible.
c) Respiratory protection	Special protections are not needed during the normal use of the product.

8.2.3 Environmental exposure controls

	YES	NO
- Exposure scenario attached		X
- Chemical Safety Assessment (CSA) attached		X

SECTION 9
PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:	Solid paste
Odor:	Characteristic
Color:	Violet
pH:	7.09
Flash point:	Not determined
Boiling range:	Not determined
Melting point:	Not determined
Explosive properties:	Not determined
Density:	1.154 g/ml at 20°C
Water solubility:	Not determined
Partition coefficient Octanol/water ($logP_{OW}$):	Not determined
Viscosity:	Not determined

9.2. Other information

Data not available in the literature search carried out.

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SECTION 10
STABILITY AND REACTIVITY

10.1. Reactivity

This substance is considered not reactive under the normal conditions of the usage.

10.2. Chemical stability

The mixture is stable at the normal condition of temperature and pressure and if stored in closed containers in well ventilated and cool place.

	NO	YES	Used stabiliser
- Stabilisers:	X	-	
- Change in physical appearance	X	-	
- Other hazards (temperature, pressure)	X	-	

10.3. Possibility of hazardous reactions

	NO	YES
- Possibility of an exothermic reaction:	X	-
- Possibility of a reaction releasing excessive pressure	X	-
- Possible degradation with instable product formation	X	-

10.4. Condition to avoid

Keep away from hot temperatures, ignition sources, from water and humidity and from light.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

If heated at high temperatures, decomposes releasing fumes and toxic gases of COX, NO_X, HBr, SO_X.

SECTION 11
INFORMATION ON TOXICOLOGICAL EFFECTS

- Exposure routes:	YES	NO
- Inhalation:		X
- Ingestion:	X	
- Skin contact:	X	
- Eye contact:	X	

- Effects (acute, delayed, chronic) following the exposure (short and/or prolonged):

- *Ingestion:* Characteristic taste. May cause negative effects if swallowed. Severe poisoning from ingestion of active ingredient Brodifacoum inhibits vitamin K, causing skin and mucosal bleeding.
- *Skin contact:* May cause redness and irritation.
- *Eye contact:* May cause redness, stinning sensation and irritation.

Mixture acts as an anticoagulant. The active ingredient (Brodifacoum) is very toxic if absorbed.

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- Toxico-kinetics information (ADME = Adsorption, Distribution, Metabolism, Excretion):

Brodifacoum is absorbed through the gastrointestinal tract.[2] After a single higher oral radiolabelled dose of brodifacoum (10 mg/kg) about 64.0% was absorbed and could be accounted for in the liver, carcass and bile 48h after dosing. The rest was recovered in the faeces, as unabsorbed material. Brodifacoum was only partially metabolised. 10 days following a single oral dose to the rat of 0.25 mg/kg, 31.3% and 19.6% of the dose was present in the carcass and liver respectively as unchanged brodifacoum. Two more polar components were detected in the bile, the major one being identified as the glucuronide. A small amount (11 – 14%) of the radioactivity was slowly eliminated in urine and faeces over 10 days following a single oral dose of 0.25 mg/kg brodifacoum. The compound shows a high potential for accumulation: in all studies undertaken and at all dose levels tested, the liver retained the largest percentage of the dose, even very long time after dosing.[3]

- Acute toxicity effects:

- *Oral::* LD_{50} male rat = 0.418 mg/kg bw for Brodifacoum [3]
  LD_{50} female rat = 0.561 mg/kg bw for Brodifacoum [3]
  LD_{50} rat = 584 mg/kg for Denatonium Benzoate [4]
- *Dermal:* LD50 rat > 2000 mg/kg (OECD 402 study with the mixture, Biolab)
  LD_{50} rat = 200mg/kg for Brodifacoum [6]
  LD_{50} male rat = 5.21mg/kg for Brodifacoum [3]
  LD_{50} female rat = 3.16 mg/kg for Brodifacoum [3]
- *Inhalation:* LC_{50} rat = 0.5mg/m3/4h for Brodifacoum [6]
  LC_{50} male rat = 4.86 mg/m3/4h for Brodifacoum [3]
  LC_{50} female rat = 3.05 mg/m3/4h for Brodifacoum [3]

- Corrosion/Irritation effects: Brodifacoum does not fulfil the EU criteria for classification as a skin or eye irritant. [3]
In two studies on rabbit (OECD 404 and OECD 405), the mixture resulted not irritant for the skin and respectively for the eyes (Biolab).

- Sensitization:

- *Dermal:* In an OECD 406 study on albino guinea pig, the mixture resulted not sensitizing (Biolab).
  Brodifacoum is able to cause skin sensitization in guinea pig. [3]
- *Respiratory:* Data not available in the literature search carried out.

- Repeated dose toxicity (experimental.):

The most sensitive repeated dose, subchronic toxicity endpoint for brodifacoum currently available is the no observed effect level (NOEL) of 0.001 mg/kg bw/day from the 90-day oral rat study. In this study, haematology measurements were made after 45 and 90 days of treatment and revealed no treatment related effects on haematological parameters after 45 days, but statistically significant increases in both the kaolin-cephalin time (KCT) and the prothrombin time (PT) at the highest dose level, 0.004 mg/kg bw/day after 90 days. [3]

- CMR effects:

- Germinal cell mutagenicity: Brodifacoum was not mutagenic in a standard range of in vitro and in vivo tests. [3]
- Carcinogenicity: Carcinogenicity and long-term toxicity studies with Brodifacoum are waived. [3]
- Reproductive toxicity: I Brodifacoum did not induce developmental effects in two adequate prenatal toxicity studies in the rat and rabbit, respectively. In particular, in the rat studies maternal hemorrhages were observed at dose levels > 0.01 mg/kg bw (NOEL 0.001 mg/kg bw) whereas no effects on conceptuses were detected up to the top dose level of 0.02 mg/kg bw. LOAEL (maternal toxicity, rat): 0.01 mg/kg/day. [3]

- Specific Target Organ Toxicity (STOT)-repeated exposure:

Data not available in the literature search carried out.
None of the acute or subchronic performed tests with Brodifacoum gave any indication for a potential neurotoxic effect. Therefore, the waiving of the neurotoxicity studies with this substance is accepted. [3]

- Aspiration hazards:
Data not available in the literature search carried out.

- Epidemiological information:
Routine monitoring of workers (industrial users) producing the active substance and formulating products has been carried out for the last forty years. Between June 1981 and September 1982, three poisoning incidents occurred with successful recovery. With the exception of these incidents, routine monitoring has shown no clinical effects in any workers. During this time there has been no evidence of allergenicity, sensitisation or any other abnormal effects induced by repeated and continual exposure to these anticoagulant rodenticides. (3)

- Reasons for the lack of classification:
Where the mixture resulted in a non-classification, this may be due to the availability of data which does not impose a classification for that specific end-point, or due to lack of data, or due to availability of inconclusive data or data which are not sufficient to get a classification as for the criteria adopted in Directives mentioned in this data sheet.

SECTION 12
ECOLOGICAL INFORMATION

12.1. Toxicity

Acute toxicity with fish	LC_{50} (*Oncorhynchus mykiss*) = 0.04	ppm/96h	for Brodifacoum	(3)
Acute toxicity with *Daphnia magna*	EC_{50} = 0.25	mg/L/48h	for Brodifacoum	(3)
Acute toxicity with algae	ErC_{50} (*Scenedesmus subspicatus)* = 0.04	mg/L/72h	for Brodifacoum	(3)

12.2. Persistence and degradability

Brodifacoum is not readily biodegradable. Brodifacoum photolytically degrades in aqueous solution with a half-life < 1 day and is hydrolytically stable in aqueous solution at environmentally relevant pH 5-9 (DT_{50} value at pH 7, and 25° temperature is estimated to be approximately 300 days). (3)
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), the substance is likely to be adsorbed onto soils or sewage sludge as the molecule is in its neutral or non-ionised form. Brodifacoum has a low vapour pressure (1 x 10-6 Pa) and a Henry's Law constant of 2.18 x 10-3 Pa.m3mol-1 (pH 7). Release to air via water is expected to be negligible.

12.3. Bioaccumulative potential

An estimated BCF of 0.60 suggests the potential for bioconcentration in aquatic organisms is low. (1)
Brodifacoum has high potential for bioaccumulation: BCF_{fish} for Brodifacoum = 35134 was calculated according to TGD equation, using log K_{ow} = 6.12 (estimated from measured K_{oc}). Using the estimated logP = 6.12 and the equation for the depuration phase indicated in OECD 305 (Annex 4), the following values have been obtained: depuration time DT_{50} = 7.96 d, (DT_{95}) = 34.4 d. (3)

12.4. Mobility in soil

Experimental evidence shows that Brodifacoum is not mobile in soil (degrades slowly under aerobic conditions in soil, with a measured DT50 of 157 days). The compound is not expected to contaminate groundwater. (3)

12.5. Results of PBT e vPvB assessment

Brodifacoum is considered to be potentially persistent, as experimental data available indicate that the substance is not readily, inherently or anaerobically biodegradable. Brodifacoum resulted hydrolytically stable, but undergoes rapid photolysis in water. No data on degradation in marine water, freshwater or sediment are available. (3)

Brodifacoum potentially fulfils the criteria for B (bioaccumulative): The estimated BCF for brodifacoum, using an estimated log Kow value of 6.1, is 35645 using the TGD equation 75, and 568.9 using the US EPA EPIWIN program.
Brodifacoum fulfils the T criterion on the basis of: acute oral toxicity data, that should classify the substance as very toxic, and based on information on analogical compounds, that may be used to classify the substance as toxic to reproduction. Also, Brodifacoum is acutely very toxic to fish.
Therefore, Brodifacoum is considered a potential PBT.

12.6. Other adverse effects

Brodifacoum is toxic to birds upon acute, short term and long term exposure with regard to lethal and sub-lethal effects. (3)
Non-target vertebrates may be exposed to the active substance either directly by ingestion of exposed product (primary poisoning) or indirectly by ingestion of the carcasses of target rodents that contain residues of the active substance (secondary poisoning).

SECTION 13
DISPOSAL CONSIDERATION

13.1. Waste treatment methods

Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water.

SECTION 14
TRANSPORT INFORMATION

Not classified for transport in agreement with regulation RID/ADR, IMO/IMDG, ICAO/IATA.

Transport in bulk according to Annex II of Marpol 73/78 and the IBC code: not applicable.

SECTION 15
REGULATORY INFORMATION

15.1 Safety, Health and Environmental regulation/legislation specific for the mixture or its ingredients

Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work (Official Journal L 183 , 29/06/1989 P. 0001 – 0008) and following amendment and National reinforcements.

Council Directive 89/686/EEC of 21 December 1989 on the approximation of the laws of the Member States relating to the personal protective equipment.

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) Official Journal L 131 , 05/05/1998 P. 0011 – 0023.

Directive 98/8/EC of the European Parliament and of the Council of 16 February 1998 concerning the placing of biocidal products on the market.

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15.2. Chemical Safety Assessment

	YES	NO
- Exposure scenario attached		X
- Chemical Safety Assessment (CSA) attached		X

SECTION 16
OTHER INFORMATION

Revisions:
- **Edition dated 12/12/2011**
- **Revision n. 00**

The classification of this product is based, where possible, on the data related to the mixture itself. Where no or inadequate test data on the mixture itself are available, the classification is based upon other available information on individual substances and similar tested mixtures which may also be considered relevant for the purposes of determining whether the mixture is hazardous.

Bibliographic sources:

(2) HSDB dataset for Brodifacoum (CASRN: 56073-10-0)
(3) Assessment Report (Inclusion of active substances in Annex I to Directive 98/8/EC) for Brodifacoum Product-type 14 (Rodenticide), 7 September 2009
(4) ChemID Lite Plus for Denatonium Benzoate (CAS 3734-33-6).
(6) ChemID Lite Plus for Brodifacoum (CAS 56073-10-0).

Acronyms
- ACGIH: American Conference of Governmental Industrial Hygienists
- ADR: Agreement concerning the carriage of dangerous goods by Road
- BCF: Bioaccumulative factor
- BEI : Biological Esposure Indices (Indici di esposizione biologica)
- CAS: Chemical Abstract Service (division of the American Chemical Society
- CHETAH : Computer programme for chemical termodynamics and energy release evaluation
- CLP: Classification, Labelling and Packaging
- CMR: Carcinogens, Mutagens, Toxic for re production substances
- EINECS: European Inventory of existing Commercial Substances
- EPA: US Environmental Protection Agency
- GHS: Globally Harmonised System
- IARC: International Agency for Research on Cancer
- IATA: International Air Transport Association Code
- IMDG: International Maritime Dangerous Goods Code
- IUPAC: International Union of Pure and Applied Chemistry
- LOEL: Lowest Observed Effect Level
- N.A.: Not Applicable
- N.A.: Not Available
- NOAEL: No Observed Adverse Effect Level)
- NTP: National Toxicology Program
- OEL: Occupational Exposure Limit
- OSHA: Occupational Safety and Health Administration
- PPE : Personal protective Equipment
- PBT: Persistent, Bioaccumulative and Toxic substances
- RID: Regulation concerning the International carriage of Dangerous goods by rail
- TLV/TWA: Threshold Limit Value/Threshold Weighted Average
- vPvB: very Persistent, very Bioaccumulative

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Information related to the regulation EC/1272/2008

List of hazards statements

H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H335	May cause respiratory irritation.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H372	Causes damage to organs through prolonged or repeated exposure.

List of precautionary statements

P102	Keep out of reach of children.
P270	Do not eat, drink or smoke when using this product.
P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P501	Dispose of contents/container in accordance with local/regional/national/ international regulation.

Information related to the Directive 67/548/EEC, Directive 1999/45/EC and Regulation (EC) n. 1907/2006

R21/22	Harmful in contact with skin and if swallowed.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
R22	Harmful if swallowed.
R/27/28	Very toxic in contact with skin and if swallowed.
R48//24/25	Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
R50	Very toxic to aquatic organisms.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S2	Keep out of the reach of children.
S13	Keep away from food, drink and animal feedingstuffs.
S24	Avoid contact with skin.
S36/37	Wear suitable protective clothing and gloves.
S35	This material and its container must be disposed of in a safe way.
S46	If swallowed, seek medical advice immediately and show this container or label.

Information on workers training

Follow criteria of Directive 98/24/EC, its amendments and National reinforcements.

Restriction of use (for ingredients): None.

Mixture which contains a substance under authorisation: **NO.**

MATERIAL SAFETY DATA SHEET - PASTION PASTA PLUS

DISCLAIMER

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