

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name RODIFEN PASTE

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

Intended use Rodenticide bait (for professional and non-professional use)

1.3. Details of the supplier of the safety data sheet

Name COLKIM S.r.l.
Full address Via Piemonte, 50
District and Country 40064 OZZANO EMILIA (BO)
Italia
tel. +39 051 / 799445
fax +39 051 / 797555

e-mail address of the competent person

responsible for the Safety Data Sheet info@colkim.it
Product distribution by COLKIM S.r.l. - Via Piemonte, 50 - 40064 OZZANO EMILIA (BO)

1.4. Emergency telephone number

For urgent inquiries refer to Company: +39 051 / 799445 (office hours)
ANTIPOISON CENTER Hospital NIGUARDA (Milano): +39 02 / 66101029

Type of registration: Biocidal product

Authorization of the Ministry of Health n. IT/2012/00008 AUT

2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is not classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to EC Regulation 1907/2006 and subsequent amendments.

2.2. Label elements.

Hazard labelling pursuant to Directives 67/548/EEC and 1999/45/EC and subsequent amendments and supplements.

Warning symbols: None.

Risk phrases (R): None.

S 2 KEEP OUT OF THE REACH OF CHILDREN.
S13 KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.
S20/21 WHEN USING DO NOT EAT, DRINK OR SMOKE.
S24 AVOID CONTACT WITH SKIN.
S46 IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW HIM CONTAINER OR LABEL.
S61 DO NOT DISPOSE OF PROPERLY. REFER TO SPECIAL INSTRUCTIONS / SAFETY DATA SHEETS.

Contains: DIFENACOUM

Safety data sheet available on request for professional users.

2.3. Other hazards.

Information not available.

3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification.
DENATONIUM BENZOATE
Conc. %.

0,001

Classification 67/548/CEE.

Xn; Xi R20/22 R41 R52/53

Classification 1272/2008 (CLP).

 Skin Irrit.2 H315 Eye Dam.1 H318 Aquatic
 Chronic.3 H412 Acute Tox.4 H302 Acute Tox.4
 H332

CAS. 3734-33-6

CE. 223-095-2

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DIFENACOUM

CAS. 56073-07-5

0,005

 T,N;
 R48/23/24/25 R26/27/28,R50/53

 Acute Tox cat 1 H310
 Acute Tox cat 2 H300
 Stot RE 1 H372
 Tox acq Acute1 H400
 Tox acq Chron 1 H410

CE. 259-978-4

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Common name	IUPAC name	CAS number	EC number	w/w (%)	Classification
Triethanol amine	2,2',2"-nitrilotriethanol	102-71-6	203-049-8	0.300	Xi R36 Eye irrit.2 H319
BHA	tert-butyl-4-methoxyphenol	25013-16-5	246-563-8	0.016	Xn R22, R36/37/38, R40 Acute tox.4 H302 Skin irrit.2 H315 Eye irrit.2 H319 Stot.RE 3 H335 Carcinogen.2 H351
BHT	2,6-di-tert-butyl-4-methylphenol	128-37-0	204-881-4	0.016	Xn R22, R36/38 Acute tox.4 H302 Skin irrit.2 H315 Eye irrit.2 H319 Tox.acq.chron.cat2 H411
Sorbic acid	(2E,4E)-hexa-2,4-dienoic acid	110-44-1	203-768-7	0.100	Xi R36/37/38 Skin.irr.2 H315; eye.irr.2 H319; STOT SE 3 H335;
Bronopol	2-bromo-2-nitropropane-1,3-diol	52-51-7	200-143-0	0.050	Xn, N R21/22, R37/38, R41, R50 Acute tox.4, H302, H312 Skin irrit.2 H315 Eye damage1 H318 STOT SE 3 H335 Aquatic acute 1 H400

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)
The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

4. First aid measures.

4.1. Description of first aid measures.

EYES: Wash immediately with plenty of water for at least 15 minutes. Seek immediate medical attention.

SKIN: Remove contaminated clothing and take a shower. Call your doctor at once. Wash contaminated clothing separately before reuse.

INHALATION: Remove to fresh air; If breathing is irregular or stopped, administer artificial respiration. Immediately call doctor.

INGESTION: Call a doctor immediately. Do not induce vomiting or give anything that is not expressly permitted by your doctor.

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

Symptoms: bleeding disorders

Tendency to bleed on the rise.

In severe cases, a massive hemorrhage of internal organs can lead to a circulatory shock which may prove fatal.

Late symptoms can occur four days after intake.

Dangers: The substance / product is an anticoagulant rodenticide with an effect similar to that of coumarin.

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

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: as an antidote to use a preparation of vitamin K 1.

5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING MEDIA

The extinction equipment should be of the conventional foam, powder and nebulised water.

NOT SUITABLE EXTINGUISHING MEDIA

Carbon dioxide

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Avoid breathing combustion products (carbon oxide, toxic pyrolysis products, etc.).

5.3. Advice for firefighters.

General information

Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention. Collect extinguishing water must not be discharged into drains. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

EQUIPMENT

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and anti-static), a overpressure mask with facemask covering the whole of the face or the self-respirator (self-protector) in the event of large quantities of smoke.

6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) Or from the air in which the leak occurred. In the case of solid product avoid the formation of dust by spraying with water if there are no contraindications. In the case of airborne dust fumes or respiratory protection. Stop leak if safe to do so. Do not handle damaged containers or the leaked product before wearing the proper protective equipment. For information on risks for the environmental and health, respiratory tract protection, ventilation and individual protective measures, refer to the other sections of this sheet. These guidelines apply to both workers to working for the emergency interventions.

Should there be a risk of exposure to splashes or squirts during work performed, there should be an adequate protection of mucous membranes (mouth, nose, eyes) in order to prevent accidental absorption.

9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	paste
Colour	blue
Odour	sweetish
Odour threshold.	Not available.
pH.	Not available.
Melting or freezing point.	Not available.
Initial boiling point.	Not available.
Boiling range.	Not available.
Flash point.	Not applicable.
Evaporation rate	Not applicable.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not applicable.
Vapour density	Not available.
Specific gravity	Not available.
Solubility	immiscible with water
Partition coefficient: n-octanol/water:	Not available.
Ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not available.
Reactive properties	Not available.

9.2. Other information.

Solid content: 0,16%

10. Stability and reactivity.

10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability.

Store at temperature between 15-35 ° C.

10.3. Possibility of hazardous reactions.

Under conditions of normal use and storage is not hazardous reactions are foreseeable.

10.4. Conditions to avoid.


Strong acids, strong bases, strong oxidizing agents.
Follow the usual precautions against chemicals.

10.5. Incompatible materials.

Oxidizing agents, concentrated inorganic acids.

10.6. Hazardous decomposition products.

When heated or in the event of fire may release gases and vapors potentially dangerous to health.

	COLKIM S.r.l.	Revision nr. 1 Dated 08/07/2014
	RODIFEN PASTE	Printed on 08/07/2014 Page n. 6/9

11. Toxicological information.

No episodes of damage to health due to exposure to the product. In any case it is recommended to operate within the rules of good industrial hygiene. The preparation may, in sensitive people, cause mild health effects by inhalation and / or cutaneous absorption and / or contact with eyes and / or ingestion.

11.1. Information on toxicological effects.

acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single inhalation. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from the properties of individual components.

Denatonium BENZOATE

LD50 (Oral): 584 mg/Kg

Eye Contact: Corrosive, causes severe eye damage.

Skin Contact: Moderately irritating to the skin, causes skin irritation

Inhalation: Harmful if inhaled. May give off gas, vapor or dust that is very irritating to the respiratory system. Exposure to products decomposition may be hazardous to your health. Following exposure Serious effects may be delayed.

Ingestion: Harmful if swallowed. May cause burns to mouth, throat and stomach.

acute toxicity

Assessment of acute toxicity:

Very toxic after single ingestion. Of high toxicity following a short inhalation. Very toxic in contact with skin. the product has not been tested. The statement has been derived from the properties of individual components.

DIFENACOUM

LD50 (Oral) rat: 1,8 mg/kg

LD50 (Dermal) rat: 63 mg/kg

LC50 (Inhaled) rat: 0,00346 – 0,005848 mg/l 4 h

irritation

Assessment of irritating effects:

slightly irritating to skin contact. Risk of serious damage to eyes. The product has not been tested. The indication is derived from the properties of the individual components.

Experimental / calculated data:

Corrosion / irritation rabbit: Irritant.

Serious damage to eyes / eye irritation rabbit: non-irritant.

Respiratory sensitization / skin

Assessment of sensitization:

There is no evidence of a potential sensitizing effect on the skin. The product was not tested. The statement has been derived from the properties of individual components.

Experimental / calculated data:

guinea pig: Tests on animals showed no sensitizing action.

Germ cell mutagenicity

Assessment of mutagenicity:

Mutagenicity tests revealed no genotoxic potential. The product has not been tested.

The statement has been derived from the properties of individual components.

Carcinogenicity

Assessment of carcinogenicity:

Animal tests have not revealed any carcinogenic effect. The product has not been tested.

The statement has been derived from the properties of individual components.

reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies show no effects of damaging fertility. The product is not been tested. The statement has been derived from the properties of individual components.

Developmental toxicant.

Assessment of teratogenicity:

Experiments on animals have not shown any toxic effects on offspring development at doses that were not toxic to the parental animals. The product has not been tested. The indication is derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of toxicity following repeated administration:

The product has not been tested. The statement has been derived from the properties of individual components.

Information on: Difenacoum

Assessment of toxicity following repeated administration:

Repeated exposure to even small amounts can cause damage to specific organs. Damage the system coagulation.

Other relevant toxicity
Misuse can be harmful to your health.

12. Ecological information.

Use according to good working practices, avoiding disposal in the environment. Inform the relevant authorities if the product has reach waterways or sewers or contaminate soil or vegetation.

12.1. Toxicity.

DENATONIUM BENZOATE

Fish LC50 (96h) : > 1000 mg/L

LC50 (shrimp) (96h) : > 400 mg/l

Crustaceans: *Daphnia magna* EC50 (48h) : 13 mg/L

Information on: Difenacoum

Toxicity to fish:

CL50 (96 h) 0,064 mg/l, *Oncorhynchus mykiss*

Information on: Difenacoum

Aquatic Invertebrates:

CE50 (48 h) 0,52 mg/l, *Daphnia magna*

Information on: Difenacoum

Aquatic plants:

NOEC (72 h) 0,25 mg/l (growth rate), *Pseudokirchneriella subcapitata*

Assessment of terrestrial toxicity: Hazardous to birds and mammals.

12.2. Persistence and degradability.

Information on: Difenacoum

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria)

12.3. Bioaccumulative potential.

Information on: Difenacoum

Bioaccumulative potential:

According to the n-octanol/water partition coefficient (log Pow) spreader is an enrichment in organisms.

12.4. Mobility in soil.

Information on: Difenacoum

Assessment transport between environmental compartments:

adsorption to solid soil particles, following penetration into the soil. It is therefore contamination of groundwater.

12.5. Results of PBT and vPvB assessment.

Information on: Difenacoum

potential substance PBT

virtually substance vPvB

12.6. Other adverse effects.

The product contains no substances included in Annex I of Regulation 2037/2000/EC on substances that deplete the ozone layer.

Other ecotoxicological advice:

It should not be downloaded in the environment.

13. Disposal considerations.

13.1. Waste treatment methods.

The preparation is not suitable for disposal in landfills and / or waste disposal public channels, natural streams or rivers. recover if possible, or start to incineration plants. The preparation as such should be considered special hazardous waste. the

H372	Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H410	Very toxic to aquatic life with long lasting effects.
H 412	Harmful to aquatic life with long lasting effects.
H319	Causes severe eye irritation.
H335	May irritate the respiratory tract.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic organisms
H411	Toxic to aquatic life with long lasting effects
H312	Harmful in contact with skin.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R 20/22	HARMFUL BY INHALATION AND INGESTION
R 41	RISK OF SERIOUS EYE DAMAGE.
R 52/53	HARMFUL TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
R48/23/24/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed
R 50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R22	Harmful if swallowed.
R21/22	Harmful in contact with skin and if swallowed.
R50	Very toxic to aquatic organisms.
R 41	Risk of serious damage to eyes.
R40	Possible risk of cancer - insufficient evidence.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R36/37/38	Irritating to eyes, respiratory system and skin.
R 36/38	Irritating to eyes and skin.
R 36	Irritating to eyes.

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. The Merck Index. - 10th Edition
8. Handling Chemical Safety
9. Niosh - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique (toxicological sheet)
11. Patty - Industrial Hygiene and Toxicology
12. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
13. ECHA website
14. Legislative Decree February 25, 2000, n. 174 "Implementation of Directive 98/8/EC concerning the placing of biocidal products on the market."
15. Consolidated Environmental 152/06 and subsequent amendments and additions.
16. Consolidated Safety, Decree 81/08 and subsequent amendments and additions.
17. Commission Regulation (EU) 528/2012 concerning the making available on the market and use of biocidal products.

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Changes to previous review:

The following sections were modified:
03 / 16