



Safety Data Sheet dated 27/3/2018, version 1

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

1.1. Product identifier Trade name:

SAPPHIRE PASTE 25

- **1.2. Relevant identified uses of the substance or mixture and uses advised against** Recommended use:
 - Rodenticide Biocidal use
 - Amateur and professional use

Use in a secure manner. For amateur and non-professionals: use secure bait stations. Professionnals must used rodenticides in bait stations or other secure bait stations which provide the same level of security.

Uses advised against:

Do not use for purposes other than those stated in "Recommended uses"

1.3. Details of the supplier of the safety data sheet

Company: LODI UK Pensnett Trading Estate 3rd Avenue West Midlands DY6 7FD KINGSWINFORD United Kingdom Tel. 00 44 1384 404242 Competent person responsible for the safety data sheet:

fds@lodi.fr

1.4. Emergency telephone number

National Poisons Information Service (NPIS) Phone number : 0344 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Warning, STOT RE 2, May cause damage to organs through prolonged or repeated exposure.

Adverse physicochemical, human health and environmental effects: No other hazards

2.2. Label elements

Hazard pictograms:



Warning Hazard statements:

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H373 May cause damage to organs (blood) through prolonged or repeated exposure. Precautionary statements: P102 Keep out of reach of children. P103 Read label before use P220 Keep/store away from food, drink and animal feedingstuffs. P260 Avoid breathing dust. P262 Do not get on skin. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves. (Professional only) P301+310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. P314 Get medical advice/attention if you feel unwell. P404+405 Store locked up in a closed container. P501 Dispose of contents/container in accordance with applicable regulations. Special Provisions: None Contains Brodifacoum Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None Other Hazards: No other hazards SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

3.1. Substances

Not available

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

| Qty | Name | Ident. Nur | nber | Classification |
|---------|----------------------|---------------------------------|--|---|
| < 0.20% | Butyl Hydroxytoluene | CAS: | 128-37-0 | 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410 |
| 25 ppm | Brodifacoum | Index number: CAS: EC: | 607-172-001 56073-10-0 259-980-5 | 3.1/1/Dermal Acute Tox. 1 H310 4.1/A1 Aquatic Acute 1 H400 M=10. 4.1/C1 Aquatic Chronic 1 H410 M=10. 3.1/1/Inhal Acute Tox. 1 H330 3.1/1/Oral Acute Tox. 1 H300 3.7/1B Repr. 1B H360 3.9/1 STOT RE 1 H372 |



SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediately and dispose off safely.

In case of: Dermal exposure, wash skin with water and then with water and soap.

In case of eyes contact:

In case of eye exposure, rinse eyes with eyes-rinse liquid or water, keep eyes lids open at least 10 minutes.

- In case of Ingestion:
 - Do not induce vomiting.
 - Do not give anything by mouth.

Immediately consult a physician and show the label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest. Assure fresh air breathing

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

Internal haemorrhage in case of ingestion

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.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Treatment:

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water. Carbon dioxide (CO2). Extinguishing media which must not be used for safety reasons: None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases. Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus . Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. Remove persons to safety.



See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Rapidly recover the product. To do so, wear a mask and protective clothing. Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Don't use empty container before they have been cleaned. Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. Contamined clothing should be changed before entering eating areas. Do not eat or drink while working. See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store in original container, tightly closed Keep away from food and drink and animal feeding stuffs Keap out of reach of children Store in places prevented from the access of children, birds, pets and farm animals. Keep away from food, drink and feed. Incompatible materials: None in particular. Instructions as regards storage premises: Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Butyl Hydroxytoluene - CAS: 128-37-0 ACGIH - TWA(8h): 2 mg/m3 - Notes: (IFV), A4 - URT irr DNEL Exposure Limit Values Not available PNEC Exposure Limit Values Brodifacoum ATP9 - CAS: 56073-10-0 Target: Fresh Water - Value: 0.00004 mg/l Target: Fresh Water - Value: 0.00004 mg/l Target: Freshwater sediments - Value: 0.00004 mg/l Target: Microorganisms in sewage treatments - Value: 0.0038 mg/l Target: Soil - Value: 0.88 mg/kg



8.2. Exposure controls

| Eye pro | ptection: |
|---------|---|
| 1 | None |
| Protect | ion for skin: |
| ١ | Nash clothing regularly |
| Protect | ion for hands: |
| ١ | Nearing gloves is recommended. |
| | Nitrile reusable gloves certified for chemical protection according to standard EN374-3 |
| | atory protection: |
| • | No special respiratory protection equipment is recommended under normal conditions |
| | of use with adequate ventilation. |
| Therma | al Hazards: |
| 1 | None |
| Enviror | nmental exposure controls: |
| ŀ | Hazardous to wildlife. |
| F | Prevent access to children, pets and non-target animals. |
| | Avoid release in the environment |
| F | Place baits in areas not submersible and weatherproof. |
| | Avoid release in watercourses and sewers |
| Approp | riate engineering controls: |
| | None |
| | |

SECTION 9: Physical and chemical properties

| Properties | Value | Method: | Notes: |
|---|----------------|-------------|--------------------------|
| Appearance and colour: | Blue paste | | Colour: 2.5PB5/6 |
| Odour: | No | | |
| | characteristic | | |
| Odour threshold: | Not available | | |
| pH: | 6.3 | CIPAC MT | 1% in water after 10 min |
| | | 75.3 | |
| Melting point / freezing | Not available | | |
| point: | | | |
| Initial boiling point and | Not available | | |
| boiling range: | | | |
| Flash point: | Not available | | |
| Evaporation rate: | Not available | | |
| Solid/gas flammability: | Not highly | Regulation | |
| | flammable | (EC) No. | |
| | | 440/2008, | |
| | | Annex, A.10 | |
| | | (solid) | |
| Upper/lower flammability or explosive limits: | Not available | | |
| Vapour pressure: | Not available | | |
| Vapour density: | Not available | | |
| Relative density: | 1.142 | OECD 109 | |
| Solubility in water: | insoluble | | |
| Solubility in oil: | Not available | | |
| Partition coefficient | Not available | | |
| (n-octanol/water): | | | |
| | | | |

9.1. Information on basic physical and chemical properties



| Auto-ignition temperature: | Not available | |
|----------------------------|---------------|------|
| Decomposition | Not available | |
| temperature: | | |
| Viscosity: | Not available | |
| Explosive properties: | Not explosive | |
| Oxidizing properties: | Not available | |

9.2. Other information

| Properties | Value | Method: | Notes: |
|--------------------------------------|---------------|---------|--------|
| Miscibility: | Not available | | |
| Fat Solubility: | Not available | | |
| Conductivity: | Not available | | |
| Substance Groups relevant properties | Not available | | |

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions None

10.4. Conditions to avoid Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product: Not available Adverse health effects May causes damage to the blood through prolonged or repeated exposure Toxicological information of the main substances found in the product: Brodifacoum - CAS: 56073-10-0 a) acute toxicity: Test: LD50 - Route: oral - Species: Mouse : = 0.4 mg/Kg - Source: Assessment report Test: LD50 - Route: dermal - Species: Rat : = 3.16 mg/Kg - Source: Assessment Report - Notes: Female Test: LC50 - Route: Inhalation - Species: Rat : = 3.05 mg/m3 - Source: Assessment Report - Notes: Female



- b) skin corrosion/irritation:
 - Test: Skin Irritant Route: dermal Species: Rabbit : Slightly irritant Source: Assessment Report
- c) serious eye damage/irritation:

Test: Eye Irritant - Route: ocular - Species: Rabbit : Slightly irritant - Source: Assessment Report - Notes: Reversible

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: dermal sensitizing - Source: Assessment Report - Notes: Maximisation test of Ritz and Buehler

g) reproductive toxicity:

Test: NOAEL - Route: oral - Species: Rat : = 0.001 mg/kg b.w/d - Source: Assessment Report - Notes: Maternal toxicity

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. Brodifacoum - CAS: 56073-10-0

a) Aquatic acute toxicity:

Endpoint: EC50 Daphnia magna = 0.25 mg/L - Duration h: 48 Endpoint: LC50 Rainbow Trout = 0.04 mg/L - Duration h: 96 Endpoint: ErC50 Algae = 0.04 mg/L - Duration h: 72

12.2. Persistence and degradability

Brodifacoum ATP9 - CAS: 56073-10-0 Biodegradability: Non-readily biodegradable

12.3. Bioaccumulative potential

Brodifacoum ATP9 - CAS: 56073-10-0

Bioaccumulation: Calculated bioaccumulation - Test: BCF - Bioconcentrantion factor 35134 - Duration: Not available - Notes: Fish - Calculated according to TGD eq. 75, using log Kow = 6.12

Bioaccumulation: Calculated bioaccumulation - Test: BCF - Bioconcentrantion factor 15820 - Duration: Not available - Notes: Earthworm - calculated according to TGD eq. 82d, using log Kow = 6.12

12.4. Mobility in soil

Brodifacoum - CAS: 56073-10-0



Mobility in soil: Not mobile

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

- 14.2. UN proper shipping name Not available
- 14.3. Transport hazard class(es) Not available
- 14.4. Packing group Not available
- 14.5. Environmental hazards

 Marine pollutant:
 No

 Not available
- 14.6. Special precautions for user Not available
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not available

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) 2015/830 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP)



Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: No restriction. Restrictions related to the substances contained: No restriction. Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

- H310 Fatal in contact with skin.
- H330 Fatal if inhaled.
- H300 Fatal if swallowed.

H360 May damage fertility or the unborn child if inhaled and in contact with skin. H372 Causes damage to organs through prolonged or repeated exposure.

| Hazard class and hazard category | Code | Description |
|----------------------------------|--------------|--|
| Acute Tox. 1 | 3.1/1/Dermal | Acute toxicity (dermal), Category 1 |
| Acute Tox. 1 | 3.1/1/Inhal | Acute toxicity (inhalation), Category 1 |
| Acute Tox. 1 | 3.1/1/Oral | Acute toxicity (oral), Category 1 |
| Repr. 1B | 3.7/1B | Reproductive toxicity, Category 1B |
| STOT RE 1 | 3.9/1 | Specific target organ toxicity - repeated exposure, Category 1 |
| STOT RE 2 | 3.9/2 | Specific target organ toxicity - repeated exposure, Category 2 |
| Aquatic Acute 1 | 4.1/A1 | Acute aquatic hazard, category 1 |
| Aquatic Chronic 1 | 4.1/C1 | Chronic (long term) aquatic hazard, category 1 |

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| Classification according to Regulation (EC) Nr. 1272/2008 | Classification procedure |
|---|--------------------------|
| STOT RE 2, H373 | Calculation method |



This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX'S DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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This MSDS cancels and replaces any preceding release.

| ADR: | European Agreement concerning the International Carriage of Dangerous Goods by Road. |
|-------------|---|
| CAS: | Chemical Abstracts Service (division of the American Chemical Society). |
| CLP: | Classification, Labeling, Packaging. |
| CSR: | Chemical safety report |
| DNEL: | Derived No Effect Level. |
| EC50: | |
| EINECS: | European Inventory of Existing Commercial Chemical Substances. |
| GefStoffVO: | Ordinance on Hazardous Substances, Germany. |
| GHS: | Globally Harmonized System of Classification and Labeling of Chemicals. |
| IATA: | International Air Transport Association. |
| IATA-DGR: | Dangerous Goods Regulation by the "International Air Transport |
| | Association" (IATA). |
| ICAO: | International Civil Aviation Organization. |
| ICAO-TI: | Technical Instructions by the "International Civil Aviation Organization" (ICAO). |
| IMDG: | International Maritime Code for Dangerous Goods. |
| INCI: | International Nomenclature of Cosmetic Ingredients. |
| KSt: | Explosion coefficient. |
| LC50: | Lethal concentration, for 50 percent of test population. |
| LD50: | Lethal dose, for 50 percent of test population. |
| N.A.: | Not available |
| PNEC: | Predicted No Effect Concentration. |
| RID: | Regulation Concerning the International Transport of Dangerous Goods |
| | by Rail. |
| STEL: | Short Term Exposure limit. |
| STOT: | Specific Target Organ Toxicity. |
| TLV: | Threshold Limiting Value. |
| TWA: | Time-weighted average |
| UN: | United Nations |
| WGK: | German Water Hazard Class. |