



SAFETY DATA SHEET  
(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

**SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product identifier**

Product name : RACAN PATE BR 25  
UFI : MV81-WX0C-E00F-FAU7

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

Recommended use(s): Rodenticide - Biocidal use.  
Use(s) advised against: Do not use for purposes other than those stated in "Recommended use(s)"

**Use descriptor system (REACH) :**

Not available.

**1.3. Details of the supplier of the safety data sheet**

Registered company name : LODI S.A.S.  
Address : PA des Quatre Routes.35390.Grand-Fougeray.FRANCE.  
Telephone : 02.99.08.48.59. Fax : 02 99 08 38 68.  
fds@lodi.fr  
<https://www.lodi-group.fr/>

**1.4. Emergency telephone number : +33 (0)1 45 42 59 59.**

Association/Organisation : Centres antipoison : <http://www.centres-antipoison.net..>

**Other emergency numbers**

European poison Control Center: 112

**SECTION 2 : HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Specific target organ toxicity (repeated exposure), Category 2 (STOT RE 2, H373).  
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.  
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

**2.2. Label elements**

Biocidal mixture (see section 15).

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazard pictograms :



GHS08

Signal Word :

WARNING

Hazard statements :

H373 May cause damage to organs through prolonged or repeated exposure (Free user organs phrase 048).

Precautionary statements - Prevention :

P260 Do not breathe dust.

Precautionary statements - Response :

P314 Get medical advice/attention if you feel unwell.

Precautionary statements - Disposal :

P501 Dispose of contents/container according to the regulation.

**2.3. Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq$  0.1% published by the European Chemicals Agency (ECHA) under article 59 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances  $\geq$  0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

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**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2. Mixtures**

**Composition :**

Identification	Classification (EC) 1272/2008	Note	%
INDEX: 607_172_00_1 CAS: 56073-10-0 EC: 259-980-5  BRODIFACOUM (ISO)	GHS06, GHS09, GHS08 Dgr Acute Tox. 1, H300 Acute Tox. 1, H310 Acute Tox. 1, H330 Repr. 1A, H360D STOT RE 1, H372 Aquatic Acute 1, H400 M Acute = 10 Aquatic Chronic 1, H410 M Chronic = 10	[ii]	0 <= x % < 2.5

**Specific concentration limits:**

Identification	Specific concentration limits	ATE
INDEX: 607_172_00_1 CAS: 56073-10-0 EC: 259-980-5  BRODIFACOUM (ISO)	Repr. 1A: H360D C>= 0.003% STOT RE 1: H372 C>= 0.02% STOT RE 2: H373 0.002% <= C < 0.02%	inhalation: ATE = 3.05 mg/l 4h (dust/mist) dermal: ATE = 3.16 mg/kg BW oral: ATE = 0.4 mg/kg BW

**Nanoform**

Not available.

**Information on ingredients :**

(Full text of H-phrases: see section 16)

[ii] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

**>SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

**4.1. description of first aid measures**

**In the event of exposure by inhalation :**

Remove casualty to fresh air and keep warm and at rest. Seek medical attention if difficulties appear and persist.

**> In the event of splashes or contact with eyes :**

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately

**In the event of splashes or contact with skin :**

In case of skin exposure, clean skin with water then with soap. Seek medical attention if irritation or discomfort develops

**In the event of swallowing :**

Do not eat or drink.

In case of oral exposure, rinse mouth carefully with water.

In case of ingestion, rinse mouth with water. In case of ingestion, obtain a medical examination immediately and show the label. Contact a veterinary in case of ingestion by a pet.

Never give anything by mouth . Do not induce vomiting.

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

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**

**Specific and immediate treatment :**

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

**Information for the doctor :**

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

**SECTION 5 : FIREFIGHTING MEASURES**

Non-flammable.

**5.1. Extinguishing media**

**Suitable methods of extinction**

In the event of a fire, use :

- sprayed water or water mist

### Unsuitable methods of extinction

In the event of a fire, do not use :  
- water jet

### 5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

### 5.3. Advice for firefighters

No data available.

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

#### For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

### 6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Contaminated wash water must be retained and disposed of. In the event of a gas leak or entry into watercourses, the ground or the drainage system, inform the responsible authorities.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

Rapidly collect the product. To do so, wear a mask and protective clothing

Wash with plenty of water.

### 6.4. Reference to other sections

No data available.

## SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

### 7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

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.

#### Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

#### Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid exposure - obtain special instructions before use.

Packages which have been opened must be reclosed carefully and stored in an upright position.

#### Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

Contaminated clothing should be changed before entering eating areas.

### 7.2. Conditions for safe storage, including any incompatibilities

No data available.

#### Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from food and drink and animal feeding stuffs.

Keep away from sources of ignition, heat and direct sunlight.

Store in the original container, hermetically sealed.

Store in places prevented from the access of children, birds, pets and farm animals.

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**Packaging**

Always keep in packaging made of an identical material to the original.

Recommended types of packaging :

Original packaging.

Suitable packaging materials :

Original packaging.

Unsuitable packaging materials :

Different that the original packaging.

**7.3. Specific end use(s)**

No data available.

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

No data available.

**Predicted no effect concentration (PNEC):**

BRODIFACOUM (ISO) (CAS: 56073-10-0)

Environmental compartment: Soil.  
PNEC : 0.88 mg/kg

Environmental compartment: Fresh water.  
PNEC : 0.00004 mg/l

Environmental compartment: Fresh water sediment.  
PNEC : 0.000004 mg/l

Environmental compartment: Waste water treatment plant.  
PNEC : 0.0038 mg/l

**8.2. Exposure controls**

**Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

**- Eye / face protection**

Avoid contact with eyes.

**- Hand protection**

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

**- Body protection**

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

**Physical state**

Physical state : Paste.

**Colour**

Colour: N/A

**Odour**

Odour threshold : Not stated.

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**Melting point**

Melting point/melting range : Not relevant.

**Freezing point**

Freezing point / Freezing range : Not stated.

**Boiling point or initial boiling point and boiling range**

Boiling point/boiling range : Not relevant.

> **Flammability**

Flammability (solid, gas) : Inflammable

**Lower and upper explosion limit**

Explosive properties, lower explosivity limit (%) : Not stated.

Explosive properties, upper explosivity limit (%) : Not stated.

**Flash point**

Flash point interval : Not relevant.

> **Auto-ignition temperature**

Self-ignition temperature : Not relevant.

Auto-ignition temperature : N/A

**Decomposition temperature**

Decomposition point/decomposition range : Not relevant.

> **pH**

pH (aqueous solution) : Not stated.

pH : 6.40  
Neutral.  
pH (1% in water): 6.39 - 6.45  
Guideline: CIPAC MT 75.3

**Kinematic viscosity**

Viscosity : Not stated.

**Solubility**

Water solubility : Insoluble.

Fat solubility : Not stated.

**Partition coefficient n-octanol/water (log value)**

Partition coefficient: n-octanol/water : Not stated.

**Vapour pressure**

Vapour pressure (50°C) : Below 110 kPa (1.10 bar).

> **Density and/or relative density**

Density : 1.142

Method for determining the density :  
OCDE Guideline 109 (Density of liquids and solids).

**Relative vapour density**

Vapour density : Not stated.

**Particle characteristics**

The mixture does not contain nanoforms.

**9.2. Other information**

No data available.

**9.2.1. Information with regard to physical hazard classes**

No data available.

**9.2.2. Other safety characteristics**

No data available.

**SECTION 10 : STABILITY AND REACTIVITY**

**10.1. Reactivity**

Stable under normal conditions.

**10.2. Chemical stability**

This mixture is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

**10.4. Conditions to avoid**

None.

### 10.5. Incompatible materials

None.

### 10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

## SECTION 11 : TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### 11.1.1. Substances

##### a) Acute toxicity :

BRODIFACOUM (ISO) (CAS: 56073-10-0)

Oral route :

LD50 = 0.4 mg/kg body weight  
Species : Mouse

Dermal route :

LD50 = 3.16 mg/kg body weight  
Species : Rat

Inhalation route (Dusts/mist) :

LC50 = 3.05 mg/m<sup>3</sup>  
Species : Rat  
Duration of exposure : 4 h

##### b) Skin corrosion/skin irritation :

No data available.

##### c) Serious damage to eyes/eye irritation :

No data available.

##### d) Respiratory or skin sensitisation :

No data available.

##### e) Germ cell mutagenicity :

No data available.

##### f) Carcinogenicity :

No data available.

##### g) Reproductive toxicant :

No data available.

##### h) Specific target organ systemic toxicity - single exposure :

No data available.

##### i) Specific target organ systemic toxicity - repeated exposure :

No data available.

##### j) Aspiration hazard :

No data available.

#### 11.1.2. Mixture

##### 11.1.2.1 Information on hazard classes

##### a) Acute toxicity :

Oral route :

No data available.

Dermal route :

No data available.

Inhalation route (Dusts/mist) :

No data available.

##### b) Skin corrosion/skin irritation :

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

##### c) Serious damage to eyes/eye irritation :

Splashes in the eyes may cause irritation and reversible damage

##### d) Respiratory or skin sensitisation :

No data available.

##### e) Germ cell mutagenicity :

No data available.

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**f) Carcinogenicity :**

No data available.

**g) Reproductive toxicant :**

No data available.

**h) Specific target organ systemic toxicity - single exposure :**

No data available.

**i) Specific target organ systemic toxicity - repeated exposure :**

May cause severe damage to organs in the event of repeated or prolonged exposure.

**j) Aspiration hazard :**

No data available.

**11.1.2.2 Other information**

**Symptoms related to the physical, chemical and toxicological characteristics**

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

**Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 64-17-5 : IARC Group 1 : The agent is carcinogenic to humans.

**11.2. Information on other hazards**

**Endocrine disrupting properties**

The mixture does not contain any substance evaluated as an endocrine disruptor with effects on human health.

**SECTION 12 : ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**12.1.1. Substances**

BRODIFACOUM (ISO) (CAS: 56073-10-0)

Fish toxicity :

LC50 = 0.04 mg/l

Factor M = 10

Species : Oncorhynchus mykiss

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 0.25 mg/l

Factor M = 1

Species : Daphnia magna

Duration of exposure : 48 h

Algae toxicity :

ECr50 0.04 mg/l

Duration of exposure : 72 h

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

**12.2. Persistence and degradability**

**12.2.1. Substances**

BRODIFACOUM (ISO) (CAS: 56073-10-0)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Endocrine disrupting properties**

The mixture does not contain any substance evaluated as an endocrine disruptor with environmental effects.

**12.7. Other adverse effects**

No data available.

## SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

### 13.1. Waste treatment methods

Do not pour into drains or waterways.

#### Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

#### Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

## SECTION 14 : TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

### 14.1. UN number or ID number

-

### 14.2. UN proper shipping name

-

### 14.3. Transport hazard class(es)

-

### 14.4. Packing group

-

### 14.5. Environmental hazards

-

### 14.6. Special precautions for user

-

### 14.7. Maritime transport in bulk according to IMO instruments

-

## SECTION 15 : REGULATORY INFORMATION

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

#### Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2023/707.

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2024/2564. (ATP 22)

#### Container information:

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

#### Particular provisions :

No data available.

#### Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):  
<https://echa.europa.eu/substances-restricted-under-reach>.

#### Authorisations agreed under Title VII of Regulation (EC) No.1907/2006 (REACH):

The mixture does not contain any substance subject to authorisation according to Annex XIV of REACH Regulation (EC) No 1907/2006:  
<https://echa.europa.eu/fr/authorisation-list>.

#### Substances that deplete the ozone layer (EC Regulation No. 1005/2009, Montreal Protocol) :

The mixture does not contain any substance posing a risk to the ozone layer.

#### Persistent organic pollutants (POP) (Regulation (EU) 2019/1021):

The mixture does not contain a persistent organic pollutant.

#### PIC Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (Rotterdam Convention):

The mixture is not subject to the Prior Informed Consent (PIC) procedure.

#### Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

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**Labelling for biocidal products (Regulation (UE) n° 528/2012) :**

Name	CAS	%	Product-type
BRODIFACOUM (ISO)	56073-10-0	0.025 g/kg	14

Product-type 14 : Rodenticides.

**15.2. Chemical safety assessment**

No data available.

**SECTION 16 : OTHER INFORMATION**

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

**Wording of the phrases mentioned in section 3 :**

H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H360D	May damage the unborn child.
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.

**> Abbreviations and acronyms :**

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

PNEC : Predicted No-Effect Concentration

CMR: Carcinogenic, mutagenic or reprotoxic.

UFI : Unique formulation identifier.

STEL : Short-term exposure limit

TWA : Moyenne pondérée dans le temps

TMP : French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

GHS08 : Health hazard

IATA : International Air Transport Association.

IMDG : International Maritime Dangerous Goods.

ICAO : International Civil Aviation Organisation

PBT: Persistent, bioaccumulable and toxic.

PIC: Prior Informed Consent.

POP: Persistent Organic Pollutant.

RID : Regulations concerning the International carriage of Dangerous goods by rail.

SVHC : Substances of very high concern.

AK-ertek : Permissible average concentration

WGK : Wassergefährdungsklasse (Water Hazard Class).

> Modification compared to the previous version