



Safety Data Sheet dated 28/3/2018, version 1

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

1.1. Product identifier

Trade name:

JADE GRAIN 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:



H373 May cause damage to organs 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

Bromadiolone

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	mber	Classification
25 ppm	Bromadiolone	CAS: EC:	28772-56-7 249-205-9	3.1/1/Oral Acute Tox. 1 H300 3.7/1B Repr. 1B H360 3.1/1/Dermal Acute Tox. 1 H310
				3.1/1/Inhal Acute Tox. 1 H330 3.9/1 STOT RE 1 H372 4.1/A1 Aquatic Acute 1 H400 M=1. 4.1/C1 Aquatic Chronic 1 H410 M=1.

SECTION 4: First aid measures

4.1. Description of first aid measures



In case of skin contact:

Wash with plenty of water and soap.

In case of skin or eye contact, immediately and thoroughly wash with water.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Rinse the eye slowly and gently with water for 15-20 minutes

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In cases of acute distress, contact the 15 (or 112).

Immediately consult a physician and show the label.

Do not induce vomiting.

In case of Inhalation:

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

In case of inhalation, breath fresh air and have a rest. In case of faintness, consult a physician and show the label.

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

Internal haemorrhage in case of ingestion

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, under medical supervision

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

Keep in a dry and cool place.

Store in original container, tightly closed

Keap out of reach of children

Keep away from food and drink and animal feeding stuffs

Store away from light.

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

No occupational exposure limit available

DNEL Exposure Limit Values

Not available

PNEC Exposure Limit Values

Bromadiolone - CAS: 28772-56-7

Target: Fresh Water - Value: 3.8E-4 mg/l

Target: Microorganisms in sewage treatments - Value: 1.33 mg/l

Target: Freshwater sediments - Value: 0.83 mg/kg

Target: Soil - Value: 0.099 mg/kg

8.2. Exposure controls

Eye protection:



Avoid contact with eyes

Protection for skin:

Provide skin protection adapted to the conditions of use

Protection for hands:

Avoid contact with skin

Amateurs and non-professionals: the gloves are recommended. Professionals: The gloves are mandatory.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

Keep away from souces of ignition, heat and direct sunlight

Environmental exposure controls:

Prevent access to children, pets and non-target animals.

Avoid release in the environment

Avoid release in watercourses and sewers

Place baits in areas not submersible and weatherproof.

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Green grain	EPA OPPTS	Colour: Green (10GY 5/6)
		830.6303 -	
		EPA OPPTS	
		830.6302	
Odour:	Cereals	EPA OPPTS	
		830.6304	
Odour threshold:	Not available		
pH:	6.91	CIPAC MT	1% in water after 10 minutes at
		75.3	20°C
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	Regulation	
	flammable	(EC) No.	
		440/2008,	
		Annex, A.10	
		(solid)	
Upper/lower flammability	Not available		
or explosive limits:			
Vapour pressure:	Not available		
Vapour density:	Not available		
Relative density:	1.377	OECD 109	
Solubility in water:	Not available		
Solubility in oil:	Not available		
Partition coefficient	Not available		
(n-octanol/water):			



Auto-ignition temperature:	Not available		
Decomposition	Not available		
temperature:			
Viscosity:	Not available		
Explosive properties:	Not explosive	Examination	
		of	
		components	
Oxidizing properties:	Not available		

9.2. Other information

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

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

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:

JADE GRAIN 25

a) acute toxicity:

Test: LD50 - Route: oral - Species: Rat : > 2000 mg/Kg - Source: OCDE n°423 Test: LD50 - Route: dermal - Species: Rat : > 2000 mg/Kg - Source: OCDE n°402

b) skin corrosion/irritation:

Test: Skin Irritant - Route: dermal - Species: Rabbit : Non irritating - Source: OCDE n°404

c) serious eye damage/irritation:

Test: Eye Irritant - Route: ocular - Species: Rabbit : Non irritating - Source: OCDE n°405



d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: dermal - Species: Guinea Pig : Non skin sensitizer - Source: OCDE n°406

Adverse health effects

May causes damage to the blood through prolonged or repeated exposure Toxicological information of the main substances found in the product:

Bromadiolone - CAS: 28772-56-7

a) acute toxicity:

Test: LD50 - Route: oral - Species: Rat : = 1.31 mg/Kg - Source: Product Assessment Report - Notes: male and female rats combined) 95% confidence limits 1.17 to 1.49 mg/kg bw/d

Test: LD50 - Route: dermal - Species: Rabbit : = 23.31 mg/Kg - Source: Product Assessment Report - Notes: male and female rabbits combined

Test: LD50 - Route: dermal - Species: Rat : = 1.71 mg/Kg - Source: Product Assessment Report - Notes: male and female rats combined

Test: LC50 - Route: Inhalation - Species: Rat : = 0.43 18206.ugL - Source: Product Assessment Report - Notes: males and females combined

g) reproductive toxicity:

Test: LOAEL - Route: oral - Species: Rabbit : = 2 18206.ugkgbwd - Source: Product Assessment Report - Notes: Maternal toxicity

Test: NOAEL - Route: oral - Species: Rabbit : = 4 18206.ugkgbwd - Source: Product Assessment report - Notes: Developmental 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;
- i) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. Bromadiolone - CAS: 28772-56-7

a) Aquatic acute toxicity:

Endpoint: ErC50 Algae = 1.14 mg/L - Duration h: 72 Endpoint: LC50 Fish = 2.86 mg/L - Duration h: 96

Endpoint: EC50 Daphnia magna = 5.79 mg/L - Duration h: 48

c) Bacteria toxicity:

Endpoint: EC50 Activated sludge = 132.8 mg/L - Duration h: 3

12.2. Persistence and degradability



Not available

12.3. Bioaccumulative potential

Bromadiolone - CAS: 28772-56-7

Bioaccumulation: Bioaccumulative - Test: Kow - Partition coefficient 3.8

12.4. Mobility in soil

Not available

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:

H300 Fatal if swallowed.

H360 May damage fertility or the unborn child if inhaled and in contact with skin.

H310 Fatal in contact with skin.

H330 Fatal if inhaled.

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.

Hazard class and	Code	Description
hazard category		
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



This safety data sheet has been completely updated in compliance to Regulation 2015/830. 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

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

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.

