

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 : JADE GRAIN  
UFI : 8W6P-J2EE-5001-V7RJ

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

Professional use  
Rodenticide -biocidal use

**Use descriptor system (REACH) :**

Not available.

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

Registered company name : (GB) LODI UK .  
Address : Building 69, Pensnett Trading Estate, Kingswinford.DY6 7FD.West Midlands.UNITED KINGDOM.  
Telephone : 01 384 40 42 42. Fax : .  
fds@lodi.fr  
(NI) LODI SAS - PA des Quatre Routes 35390 Grand-Fougeray FRANCE

**1.4. Emergency telephone number : 0844 892 011.**

Association/Organisation : NPIS (National Poison Centre) - Birmingham Unit .

**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.**

Reproductive toxicity, Category 1B (Repr. 1B, H360D).  
Specific target organ toxicity (repeated exposure), Category 1 (STOT RE 1, H372).  
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 :

DANGER

Product identifiers :  
EC 249-205-9 BROMADIOLONE (ISO)

Hazard statements :

H360D May damage the unborn child.  
H372 Causes damage to organs through prolonged or repeated exposure (Free user organs phrase 048).

Precautionary statements - Prevention :

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response :

P308 + P313 IF exposed or concerned: Get medical advice/attention.  
P314 Get medical advice/attention if you feel unwell.

Precautionary statements - Storage :

P405 Store locked up.

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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.

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

**3.2. Mixtures**

**> Composition :**

Identification	Classification (EC) 1272/2008	Note	%
INDEX: 57_55_6A CAS: 57-55-6 EC: 200-338-0 REACH: 01-2119456809-23		[i]	0 $\leq$ x % < 2.5
PROPYLENE GLYCOL INDEX: 607_716_00_8 CAS: 28772-56-7 EC: 249-205-9	GHS06, GHS09, GHS08 Dgr Acute Tox. 1, H300 Acute Tox. 1, H310 Acute Tox. 1, H330 Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1	[ii]	0 $\leq$ x % < 2.5
BROMADIOLONE (ISO)			

**Specific concentration limits:**

Identification	Specific concentration limits	ATE
INDEX: 57_55_6A CAS: 57-55-6 EC: 200-338-0 REACH: 01-2119456809-23		inhalation: ATE = 317 mg/l 4h (dust/mist)
PROPYLENE GLYCOL INDEX: 607_716_00_8 CAS: 28772-56-7 EC: 249-205-9	Repr. 1B: H360D C $\geq$ 0.003% STOT RE 1: H372 C $\geq$ 0.005% STOT RE 2: H373 0.0005% $\leq$ C < 0.005%	dermal: ATE = 50 mg/kg BW
BROMADIOLONE (ISO)		

**Nanoform**

Not available.

**Information on ingredients :**

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

[i] Substance for which maximum workplace exposure limits are available.

[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.

Remove contact lenses

Protect uninjured eye.

Seek medical attention immediately.

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

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

Remove contaminated clothing, wash skin with soap and rinse thoroughly with water. Do not use solvents or thinners.

Wash with plenty of water and soap.

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Seek medical attention if ill effect or irritation develops.

### > In the event of swallowing :

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention, showing the label.

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.

Internal bleeding if swallowed.

### 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

## 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
- carbon dioxide (CO2)

#### 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 (CO2)

### 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

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.

Retain contaminated washing water and dispose it. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

Retrieve the product by mechanical means (sweeping/vacuuming).

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.  
Avoid exposure to pregnant women and warn women of child-bearing age of the possible risks

### 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.  
Do not breathe in dust.  
Avoid exposure - obtain special instructions before use.  
Packages which have been opened must be reclosed carefully and stored in an upright position.  
Contaminated clothing should be changed before entering eating areas.  
Do not eat or drink while working.

### Prohibited equipment and procedures :

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

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

No data available.

### Storage

Keep the container tightly closed in a dry, well-ventilated place.  
Keep out of reach of children.  
Keep away from food and drink and animal feeding stuffs.  
Store in the original container, hermetically sealed.  
Keep away from sources of ignition - No Smoking.

### 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 than 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.

### Occupational exposure limits :

- UK :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
57-55-6	10 mg/m <sup>3</sup>				

### 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.

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**|> - 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.

Type of gloves recommended :

- PVA (Polyvinyl alcohol)

- Butyl Rubber (Isobutylene-isoprene copolymer)

**- 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.

Wear work clothing.

**|> - Respiratory protection**

Avoid inhaling dust.

Wear appropriate respiratory apparatus (ex. FFP1 class).

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

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

**Physical state**

Physical state : Solid in granules.

Grain.

**Colour**

Green.

**Odour**

Odour threshold : Not stated.

Cereals.

**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) : Non 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.

**Decomposition temperature**

Decomposition point/decomposition range : Not relevant.

**pH**

pH (aqueous solution) : Not stated.

pH : 6.90

Neutral.

**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.

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**Vapour pressure**

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

**Density and/or relative density**

Density : 1.377

**Relative vapour density**

Vapour density : Not stated.

**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**

Avoid :

- formation of dusts

Dusts can form an explosive mixture with air.

**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**

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.

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.

Splashes in the eyes may cause irritation and reversible damage

Presumed human reproductive toxicant.

May damage the unborn child.

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

**11.1.1. Substances**

**a) Acute toxicity :**

BROMADIOLONE (ISO) (CAS: 28772-56-7)

Oral route : LD50 <= 5 mg/kg body weight

Dermal route : LD50 = 50 mg/kg body weight

Inhalation route (Dusts/mist) : LC50 <= 0.05 ppm  
Duration of exposure : 4 h

PROPYLENE GLYCOL (CAS: 57-55-6)

Oral route : LD50 > 5000 mg/kg body weight  
Species : Rat

Dermal route : LD50 > 2000 mg/kg body weight  
Species : Rabbit

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Inhalation route (Dusts/mist) :

LC50 = 317 mg/l  
Species : Rabbit  
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**

**a) Acute toxicity :**

Species : Rat  
LD50 > 2000 mg/kg  
OECD Guideline 423 (Acute Oral toxicity Acute Toxic Class Method)  
Species : Rat  
LD50 > 2000 mg/kg  
OECD Guideline 402 (Acute Dermal Toxicity)

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

Irritation :

No observed effect.  
Average score < 1.5  
Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

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

No data available.

**d) Respiratory or skin sensitisation :**

Local lymph node stimulation test :

Non-sensitiser.  
Species : Guinea pig  
OECD Guideline 406 (Skin Sensitisation)

**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.

**11.1.2.2 Other information**

**11.2. Information on other hazards**

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

CAS 111-42-2 : IARC Group 2B : The agent is possibly carcinogenic to humans.

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SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

BROMADIOLONE (ISO) (CAS: 28772-56-7)

Fish toxicity :

LC50 = 2.89 mg/l

Species : Oncorhynchus mykiss

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 5.79 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

12.1.2. Mixtures

12.2. Persistence and degradability

12.2.1. Substances

BROMADIOLONE (ISO) (CAS: 28772-56-7)

Biodegradability :

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

12.2.2. Mixtures

Biodegradation :

No data on decomposition is available, the mixture is not considered to decompose rapidly.

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

No data available.

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.

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

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

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

-



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**14.5. Environmental hazards**

-

**14.6. Special precautions for user**

-

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

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**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. 2022/692 (ATP 18)

**Container information:**

No data available.

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

The mixture contains at least one restricted substance under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): <https://echa.europa.eu/substances-restricted-under-reach>. Please refer to Section 3 to identify the substance involved.

For professional users only.

**Particular provisions :**

No data available.

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

Name	CAS	%	Product-type
BROMADIOLONE (ISO)	28772-56-7	0.05 g/kg	14

Product-type 14 : Rodenticides.

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

The mixture does not contain a persistent organic pollutant.

**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.

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

ATE : Acute Toxicity Estimate

BW : Body Weight

CMR: Carcinogenic, mutagenic or reprotoxic.

UFI : Unique formulation identifier.

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

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

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

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ICAO : International Civil Aviation Organisation

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

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS08 : Health hazard

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.

|> Modification compared to the previous version