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

1.1. Product identifier
   Trade name: BLACK PEARL GRAIN

1.2. Relevant identified uses of the substance or mixture and uses advised against
   Recommended use:
   Rodenticide - Biocidal use
   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, Aquatic Acute 1, Very toxic to aquatic life.
   Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.
   Adverse physicochemical, human health and environmental effects:
   No other hazards

2.2. Label elements
   Hazard pictograms:
   Warning
   Hazard statements:
   H410 Very toxic to aquatic life with long lasting effects.
   Precautionary statements:
   P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P273 Avoid release to the environment.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:
None

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 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:

<table>
<thead>
<tr>
<th>Qty</th>
<th>Name</th>
<th>Ident. Number</th>
<th>Classification</th>
</tr>
</thead>
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<tr>
<td>4% m/m</td>
<td>Chloralose technical grade</td>
<td>Index number: 605-013-00-0</td>
<td>3.1/3/Oral Acute Tox. 3 H301</td>
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<td></td>
<td></td>
<td>CAS: 15879-93-3</td>
<td>3.1/4/Inhal Acute Tox. 4 H332</td>
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<td></td>
<td></td>
<td>EC: 240-016-7</td>
<td>3.8/3 STOT SE 3 H336</td>
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<td></td>
<td></td>
<td>4.1/A1 Aquatic Acute 1 H400</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>M=10.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.1/C1 Aquatic Chronic 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H410 M=10.</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures
In case of skin contact:
Wash with plenty of water and soap.
Remove contaminated clothing, wash skin with soap and rinse thoroughly with water.
Do not use solvents or thinners.

In case of eyes contact:
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wash thoroughly under a trickle of water (warm if possible) for several minutes, holding the eyelids open under the stream of water.

In case of Ingestion:
Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.
Immediately consult a physician and show the label.
Do not induce vomiting.
Whatever the amount of product ingested, do not eat and do not drink. Install the victim in lateral safety position and protect it from injury in case of sudden movement or convulsion. Monitor the victim's breath. In cases of acute distress, contact the 15 (or 112).

In case of Inhalation:
- Remove casualty to fresh air and keep warm and at rest.
- Assure fresh air breathing
- Allow the victim to rest.

4.2. Most important symptoms and effects, both acute and delayed
- Cardiac arrhythmias
- Convulsions
- In case of severe poisoning, central nervous system depression, hypotension, bradycardia and hypothermia may occur.
- Unconsciousness
- Diminished responsiveness
- Drowsiness
- Inebriation

4.3. Indication of any immediate medical attention and special treatment needed
- Treatment:
  - Contains a rodenticide which is a depressant of the nervous system and a convulsant.
  - Bronchial obstruction early. Treatment is symptomatic, there is no antidote.

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.
Contaminated 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 the original container
Keep out of reach of children
Keep away from food and drink and animal feeding stuffs
Keep away from sources of ignition, heat and direct sunlight
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
Not available

8.2. Exposure controls
Eye protection:
None
Protection for skin:
No special clothing / skin protection equipment is recommended under normal conditions of use.
Avoid contact with skin
Protection for hands:
Amateurs and non-professionals: the gloves are recommended. Professionals : The gloves are mandatory.
Wash hands after handling.
Respiratory protection:
Not applicable
Thermal Hazards:
None
Environmental exposure controls:
Prevent access to children, pets and non-target animals.
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

<table>
<thead>
<tr>
<th>Properties</th>
<th>Value</th>
<th>Method:</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance and colour:</td>
<td>Black grains</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Odour</td>
<td>cereal</td>
<td>--</td>
<td>--</td>
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<tr>
<td>Odour threshold</td>
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<tr>
<td>pH</td>
<td>7.36 at 1%w/v</td>
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</tr>
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<td>Melting point / freezing point</td>
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<tr>
<td>Initial boiling point and boiling range</td>
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<td>--</td>
</tr>
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<td>Flash point</td>
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</tr>
<tr>
<td>Evaporation rate</td>
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<td>--</td>
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<td>Solid/gas flammability</td>
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<tr>
<td>Upper/lower flammability or explosive limits</td>
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<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Vapour pressure</td>
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<td>Vapour density</td>
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<tr>
<td>Relative density</td>
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<td>Solubility in water</td>
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<td>--</td>
</tr>
<tr>
<td>Solubility in oil</td>
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<td>--</td>
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<td>Partition coefficient (n-octanol/water)</td>
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<td>Auto-ignition temperature</td>
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<td>--</td>
</tr>
<tr>
<td>Decomposition temperature</td>
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<td>--</td>
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<tr>
<td>Viscosity</td>
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<td>--</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No explosive properties</td>
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<td>--</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No oxidizing properties</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

9.2. Other information
**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 mixture:
BLACK PEARL GRAIN
a) acute toxicity:
   Test: LD50 - Route: oral - Species: Rat : > 5000 mg/Kg
b) skin corrosion/irritation:
   Test: Skin Irritant - Route: dermal - Species: Rabbit : 0 - Notes: Irritation légère à modérée - Toujours réversible
c) serious eye damage/irritation:
   Test: Eye Irritant - Route: ocular - Species: Rabbit : 0 - Notes: Irritation légère à modérée - Toujours réversible

Toxicological information of the main substances found in the mixture:
Chloralose technical grade - CAS: 15879-93-3
a) acute toxicity:
   Test: LD50 - Route: oral - Species: Rat : = 212 mg/Kg - Notes: Femelle

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.

Chloralose technical grade - CAS: 15879-93-3

a) Aquatic acute toxicity:

   Endpoint: LC50 Onchorhynchus mykiss = 2.4 mg/L - Duration h: 96
   Endpoint: EC50 Daphnia magna = 0.027 mg/L - Duration h: 48
   Endpoint: ErC50 Algae = 0.52 mg/L - Duration h: 72

**12.2. Persistence and degradability**

Not available

**12.3. Bioaccumulative potential**

Not available

**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. In so doing, comply with the local and national regulations currently in force.

**SECTION 14: Transport information**

**14.1. UN number**

ADR-UN number: UN3077

**14.2. UN proper shipping name**

ADR-Shipping Name: Environmentally Hazardous Substance, Solid NOS (Chloralose), 9, III, (E)

**14.3. Transport hazard class(es)**

ADR-Class: 9

**14.4. Packing group**

ADR-Packing Group: III
14.5. Environmental hazards
Marine pollutant: No

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not available

Product eligible for exemption under the special provisions A197 (IATA), 375 (ADR) and section 2.10.2.7 (IMDG)

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. 1221/2015 (ATP 7 CLP)
Regulation (EU) n. 918/2016 (ATP 8 CLP)
Regulation (EU) n. 1179/2016 (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)
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

SECTION 16: Other information
Full text of phrases referred to in Section 3:
H301 Toxic if swallowed.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Hazard class and hazard category</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 3</td>
<td>3.1/3/Oral</td>
<td>Acute toxicity (oral), Category 3</td>
</tr>
<tr>
<td>Acute Tox. 4</td>
<td>3.1/4/Inhal</td>
<td>Acute toxicity (inhalation), Category 4</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>3.8/3</td>
<td>Specific target organ toxicity - single exposure, Category 3</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>4.1/A1</td>
<td>Acute aquatic hazard, category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>4.1/C1</td>
<td>Chronic (long term) aquatic hazard, category 1</td>
</tr>
</tbody>
</table>

This safety data sheet has been completely updated in compliance to Regulation 2015/830. 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).
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.
LTE: Long-term exposure.
N.A.: Not available
PNEC: Predicted No Effect Concentration.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:  Short-term exposure.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV:  Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
UN:   United Nations
WGK:  German Water Hazard Class.