SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product: **ERALA RAT & MOUSE KILLER**
Supplier: Westland Horticulture Limited
14 Granville Industrial Estate
Granville Road
Dungannon
Co Tyrone BT70 1NJ

UK Tel: 08700 66 35 66
Fax: 01480 44 33 96

Ready for use rodenticide containing 50ppm bromadiolone.

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>EINECS-No.</th>
<th>Symbols</th>
<th>R-phrases</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denatonium benzoate</td>
<td>3734-33-6</td>
<td>223-095-2</td>
<td>Xn, Xi</td>
<td>R20 R22 R37 R38 R41 R52/53</td>
<td>0.001%</td>
</tr>
<tr>
<td>Propane-1,2-diol (Propane-1,2-diol particulates)</td>
<td>57-55-6</td>
<td>200-338-0</td>
<td></td>
<td>1-10%</td>
<td></td>
</tr>
<tr>
<td>Flour</td>
<td></td>
<td></td>
<td></td>
<td>70-80%</td>
<td></td>
</tr>
<tr>
<td>Kaolin (Kaolin, respirable dust)</td>
<td>1332-58-7</td>
<td></td>
<td></td>
<td>1-10%</td>
<td></td>
</tr>
<tr>
<td>Sugar (Sucrose)</td>
<td>57-50-1</td>
<td></td>
<td></td>
<td>1-10%</td>
<td></td>
</tr>
<tr>
<td>Bromadiolone</td>
<td>28772-56-7</td>
<td>249-205-9</td>
<td>T+, T</td>
<td>R27/28 R48/24/25 R50/53</td>
<td>0.005%</td>
</tr>
</tbody>
</table>

For the full text of the R phrases mentioned in this Section, see Section 16.

3. HAZARDS IDENTIFICATION

Main hazards:
The preparation is non-dangerous in accordance with Directive 1999/45/EC. Unlikely to cause harmful effects under normal conditions of handling and use. Harmful to wildlife. Wild mammals and birds may be at greater risk if the product is not used in accordance with its label.

4. FIRST AID MEASURES

**General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). ADVICE FOR DOCTORS: Bromadiolone is an indirect anti-coagulant. Phytomenadione, Vitamin K1, is antidotal. Determine prothrombin time not less than 18 hours after consumption. If elevated, administer Vitamin K1 until prothrombin time normalises. Continue determination of prothrombin time for two weeks after withdrawal of antidote and resume treatment if elevation occurs in that time.

**Inhalation:** Unlikely to present an inhalation hazard unless excessive dust is present. Move the exposed person to fresh air. Obtain medical advice immediately.

**Skin contact:** May cause irritation in susceptible persons. Remove contaminated clothing. Wash off immediately with plenty of soap and water. If irritation persists obtain medical advice immediately.
medical attention. Contaminated clothing should be washed and dried before re-use.

**Eye contact:** May cause irritation in susceptible persons. Rinse immediately with plenty of water and seek medical advice if irritation persists.

**Ingestion**
If swallowed seek medical advice immediately and show this container or label.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media:** Keep fire exposed containers cool by spraying with water if exposed to fire. Carbon dioxide (CO₂) Alcohol resistant foam. Dry chemical. Use extinguishing media appropriate to the surrounding fire conditions. Do NOT use water jets.

**Protective equipment:** In the event of fire wear: self-contained breathing apparatus. Suitable gloves and boots.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Wear suitable protective clothing, gloves and eye/face protection. See section 8

**Environmental precautions:** Prevent further leakage or spillage, if safe to do so.

**Spill clean up methods:** Clean up promptly by sweeping or vacuum. Subsequently, wash the contaminated area with water, taking care to prevent the washings entering sewers or drains.

### 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes and skin. Avoid formation of dust. Do not smoke, eat or drink while handling this product. Wash hands and face before eating, drinking or smoking. Always use good personal hygiene procedures when handling chemicals. Read the label before use.

**Storage:** Keep in a cool, dry, well ventilated area. Keep out of the reach of children. Keep away from food and animal feedstuffs. Keep away from oxidising agents.

**Specific use:** Ready for use rodenticide containing 50ppm bromadiolone.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>WEL 8-hr limit ppm:</th>
<th>WEL 8-hr limit mg/m³:</th>
<th>WEL 15 min limit ppm:</th>
<th>WEL 15 min limit mg/m³:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane-1,2-diol (Propane-1,2-diol particulates)</td>
<td>8</td>
<td>10</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Propane-1,2-diol (Propane-1,2-diol total vapour and particulates)</td>
<td>8</td>
<td>474</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>Flour</td>
<td>8</td>
<td>10</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Kaolin (kaolin, respirable dust)</td>
<td>8</td>
<td>2</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Sugar (Sucrose)</td>
<td>8</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
</tbody>
</table>
Respiratory protection: Unlikely to present an inhalation hazard unless excessive dust is present. If levels approach the WEL, then suitable approved respiratory protection should be worn.

Hand protection: Impervious gloves.

Eye protection: Tight fitting goggles if exposed to excessive dust.

Protective equipment: Impervious clothing. Boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Colour</td>
</tr>
<tr>
<td>Odour</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

| Stability: | Stable under normal conditions. |
| Conditions to avoid: | Heat, sparks and open flames. |
| Materials to avoid: | Oxidising agents. |

Hazardous decomposition products: Combustion of thermal decomposition will produce toxic and irritant fumes.

11. TOXICOLOGICAL INFORMATION

Denatonium benzoate  
Oral Rat LD50 = 749 mg/kg  
Inhalation Rat LC50/4 h = 0.2 mg/l

Propane-1,2-diol  
Oral Rat LD50 = >2000 mg/kg

Bromadiolone  
Dermal Rat LD50 = 23 mg/kg  
Oral Rat LD50 =< 5 mg/kg

Acute toxicity: ORL RAT LD50 approx 20g/kg (calculated).

Corrosivity: No irritation expected.

Sensitization: Flour dust is a respiratory sensitiser causing asthma. As the product is a pellet, it is unlikely to create sufficient dust to cause any problems.

Mutagenic effects: No evidence to suggest anticoagulant rodenticides are mutagenic.

Carcinogenic effects: No evidence to suggest anticoagulant rodenticides are carcinogenic.
12. ECOLOGICAL INFORMATION

Ecotoxicity: As the product contains 50ppm bromadiolone, unlikely to be hazardous to aquatic life. Harmful to wildlife. Read all precautions before use.

Propane-1,2-diol
Daphnia EC50-48h = 100 mg/l
Fish LC50/96h = 100 mg/l

Bromadiolone
Daphnia EC50-48h = 5.79 mg/l
Rainbow trout LC50/96h = 2.89 mg/l

Further information: Wild mammals and birds may be at greater risk if the product is not used in accordance with its label. If soil contamination occurs, the product will not be taken up by plants. This product is of low water solubility and has very low mobility in soil; it presents a negligible risk to groundwater. Low – level residues of rodenticides have been detected in a wide range of wildlife species. Proper use of products in accordance with the label, will help to minimise the exposure of wildlife rodenticides.

13. DISPOSAL CONSIDERATIONS

Disposal considerations: Dispose of in compliance with all local and national regulations.

Disposal of packaging: Empty containers can be sent to landfill after cleaning, if in compliance with local and national regulations.

14. TRANSPORT INFORMATION

Further information: Not classified as dangerous for transport.

15. REGULATORY INFORMATION

Labelling: Covered by the Control of Pesticides Regulations (1986). It has been labelled in accordance with those regulations.

Safety phases: To avoid risks to man and the environment, comply with the instructions for use.
P14 – Safety data sheet available for professional user on request.
S1/2 – Keep locked up and out of the reach of children.
S13 – Keep away from food, drink and animal feedstuffs.
S20/21 – When using do not eat, drink or smoke.
S45 – In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Statutory Conditions Relating to use: The (COSHH) Control of Substances Hazardous to Health Regulations 2002 may apply to the use of this product at work. Avoid contact by mouth. Prevent access to bait by children, birds and non-targeted animals, particularly dogs, cats, pigs and poultry. Do not place bait where food, feed, or water could become contaminated (except when used in sewers). Search for and remove rodent bodies at frequent intervals during treatment, ideally at each bait inspection, (unless used in sewers). Collect and dispose of the remains of bait and any remaining rodent bodies after treatment (unless used in sewers). You must ensure that you comply with legislation regarding the correct disposal of waste. For further guidance contact the Environmental Agency or your local
Scottish Environmental Protection Agency (SEPA) office. This product contains substances which are known to be hazardous to the environment. Do not contaminate waterbodies or watercourses with chemicals or the used container. Harmful to wildlife. READ ALL PRECAUTIONS BEFORE USE.

16. OTHER INFORMATION

Text of risk phases in Section 3:
R20: Harmful by inhalation.
R22: Harmful if swallowed.
R27/28: Very toxic in contact with skin and if swallowed.
R37: Irritating to respiratory system.
R41: Risk of serious damage to eyes.
R48/24/25: Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
R50/53: Very toxic to aquatic organisms, may cause long-term effects in the aquatic environment.
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

General information: Approved for use in the UK, HSE No.: 9206. Approved for use in EIRE. PCS No. 96176.

Restricted use: Ready for use rodenticide containing 50 ppm bromadiolone.

Data sources: Raw material suppliers Safety Data Sheets. CHIP 2009 EH40.