Material Safety Data Sheet

Product Name: BANDIT Liquid Herbicide

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

- **Product Name**: BANDIT Liquid Herbicide
- **Product Code**: 0302
- **Product Use**: For the control of many broadleaf weeds and annual grasses in cotton.
- **Company Name**: Crop Care Australasia Pty Ltd (ABN 53 061 362 347)
- **Address**: 77 Tingira Street Pinkenba Queensland 4008 Australia
- **Emergency Tel.**: 1800 033 498
- **Telephone/Telex Number**: Tel: (07) 3867 9100 Fax: (07) 3867 9110
- **Product Type**: Group C Herbicide
- **Other Information**: This MSDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prometryn</td>
<td>7287-19-6</td>
<td>250 g/L</td>
</tr>
<tr>
<td></td>
<td>Fluometuron</td>
<td>2164-17-2</td>
<td>250 g/L</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td></td>
<td>30-60 %</td>
</tr>
<tr>
<td></td>
<td>Dispersants and stabilisers</td>
<td></td>
<td>&lt;10%</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

- **Irritating to eyes.**
- **Other Information**: Poisons Schedule 5

4. FIRST AID MEASURES

- **Inhalation**: Over-exposure by inhalation is improbable. Check for other causes of observed symptoms and seek medical advice.
- **Ingestion**: Rinse mouth and then drink plenty of water. If vomiting occurs, give more water to drink to assist dilution. If poisoning occurs, contact a doctor or Poisons Information Centre on 13 11 26 (Australia).
- **Skin**: Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
- **Eye**: If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice.
- **Advice to Doctor**: Treat symptomatically.

5. FIRE FIGHTING MEASURES

- **Extinguishing Media**: If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.
- **Specific Hazards**: Considered low risk due to water content, however upon evaporation of water the product is combustible.
- **Hazardous Combustion Products**: If involved in a fire, the dehydrated components may emit flourine compounds, oxides of sulphur, oxides of nitrogen and oxides of carbon.
- **Emergency Action in case of Fire**: If exposed to fire, keep container cool by spraying with water.
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Issued by CRPCARE

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Classified as hazardous according to criteria of NOHSC

Protective Equipment
Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal
Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal.

Personal Protection
For appropriate personal protective equipment (PPE), refer Section 8.

7. HANDLING AND STORAGE

Handling
Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide or used containers.

Storage
Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limits
No exposure standards have been set for this product.

Personal Protective Equipment
It is good practice to wear suitable personal protective equipment (PPE).

When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles.

Eng. Controls
Handle in well ventilated areas, generally natural ventilation is adequate.

Hygiene Measures
After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.

Requirements Concerning Special Training
NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials. By 1st September, 2005 all users must have received such training.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
White to pink liquid

Odour
Characteristic odour

Solubility in Water
Disperses in water.

Vapour Pressure
0.165 mPa @ 25°C for prometryn;
0.125 mPa @ 25°C for fluometuron.

Partition co-efficient, n-octanol/water
Kow Log P is 3.1 (prometryn); 2.38 (fluometuron)

Flammability
Non combustible material.

pKa is 4.1 (weak base) for prometryn

10. STABILITY AND REACTIVITY

Stability
Stable under normal conditions.

Hazardous Polymerization
Hazardous polymerisation is not possible.

Hazardous Reaction
Keep away from strong oxidising agents.

11. TOXICOLOGICAL INFORMATION

Inhalation
May cause irritation to the respiratory tract if mists or aerosols are inhaled.

Ingestion
Low toxicity. However, swallowing large amounts may cause nausea and vomiting.
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**Skin**
May irritate the skin.

**Eye**
May irritate the eyes.

**Chronic Effects**
Liver and kidney damage has been noted in laboratory animals that have been fed excessive doses of fluometuron.

**Acute Toxicity - Oral**
- LD50 (rat) 3832 mg/kg for fluometuron
- LD50 (rat) >2000 mg/kg for prometryn

**Acute Toxicity - Dermal**
- LD50 (rabbit) >2020 mg/kg for prometryn

**Acute Toxicity - Inhalation**
- LC50 (rat) (4hr) >5.2 mg/l for prometryn

**Eye Irritation**
Moderate eye irritant.

**Skin Irritation**
Mild to moderate skin irritant.

**Skin Sensitisation**
Product is not a skin sensitiser.

**Other Information**
The Australian Acceptable Daily Intake (ADI) for fluometuron for a human is 0.02 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 2 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, August 2003).

The Australian Acceptable Daily Intake (ADI) for prometryn for a human is 0.03 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 3 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, August 2003).

12. ECOLOGICAL INFORMATION

**Other Precautions**
Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.

**Environ. Protection**
Spray drift can cause damage, read the label for more information.

**Persistence / Degradability**
Both active ingredients persist for some time in the soil.
Fluometuron will biodegrade to loose about 50% of its strength in the soil in 60 - 75 days , depending on soil conditions.
Prometryn will biodegrade in the soil in 30 - 90 days, depending on soil conditions.

**Acute Toxicity - Fish**
- LC50 (96 hr) for rainbow trout is 47 mg/l for fluometuron
- LC50 (96 hr) for rainbow trout is 5.5 mg/l for prometryn

**Acute Toxicity - Daphnia**
- LC50 (48 hr) for daphnia is 23 mg/l for fluometuron
- LC50 (48 hr) for daphnia is 13 mg/l for prometryn

**Acute Toxicity - Other Organisms**
Not toxic to birds.
The following data is for the active ingredient, fluometuron.
- LC50 (96hr) for mallard ducks is 2974 mg/l
The following data is for the active ingredient, prometryn.
- LC50 (96hr) for mallard ducks is 4640 mg/l
Bees: Not toxic to bees. LD50 >99 µg/bee.

13. DISPOSAL CONSIDERATIONS

**Product Disposal**
On site disposal of the concentrated product is not acceptable.
Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemCollect).
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Container Disposal
Do not use this container for any other purpose.
Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations.
drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMuster symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program.
If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.
Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

U.N. Number  None Allocated
DG Class  None Allocated
Hazchem Code  None Allocated
Packing Group  None Allocated

Storage and Transport
Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. REGULATORY INFORMATION

Risk Phrase  R36 Irritating to eyes.
Safety Phrase  S13 Keep away from food, drink and animal feeding stuffs.
  S2 Keep out of reach of children.
  S25 Avoid contact with eyes.
  S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  S45 In case of accident or if you feel unwell seek medical advice immediately

Poisons Schedule  S5
Hazard Category  Irritant
Packaging & Labelling  CAUTION
  KEEP OUT OF REACH OF CHILDREN
  READ SAFETY DIRECTIONS BEFORE OPENING OR USING
AICS (Australia)
All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

Contact Person/Point
Normal Hours: Mr Volker Maier  Phone: (03) 9282 1000
After Hours: Shift Supervisor  Phone: 1800 033 498

Revisions Highlighted
First Issue

...End Of MSDS...