1. Identification

**GHS Product Identifier**
AGRITONE 750®

**Product Code**
00066

**Product Type**
Selective herbicide

**Company Name**
Nufarm NZ

**Address**
6 Manu Street, Otahuhu
Auckland 2024 New Zealand

**Telephone/Fax Number**
Tel: 0-9-270 4150

**Emergency phone number**
0800 651 911

**Email**
info@nz.nufarm.com

**Recommended use of the chemical and restrictions on use**
Selective herbicide for the control of many broadleaf weeds in established pastures, grass playing fields and lawns, and in cereals, grass seed and linseed crops.

**Other Information**
This SDS 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. Hazard Identification

**Other Information**
6.1D acute toxicant, 6.9A target organ toxicant, 8.3A eye corrosive, 9.1A aquatic toxicant, 9.2A soil toxicant, 9.3B terrestrial vertebrate toxicant,

**TOXICITY**
Toxic - may cause liver damage from repeated oral exposure at high doses. May be harmful if swallowed, inhaled or absorbed through the skin.

**CORROSIVE**
Danger - this product is corrosive and may cause eye damage.

**ECOTOXIC**
Very toxic to aquatic organisms.

Selective herbicide - very toxic to some plant species.

Toxic to terrestrial vertebrates.

3. Composition/information on ingredients

**Chemical Characterization Ingredients**
Liquid

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCPA (present as the dimethylamine salt)</td>
<td>2039-46-5</td>
<td>750 g/L</td>
</tr>
<tr>
<td>Casein</td>
<td>9000-71-9</td>
<td>0-10 %</td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td>to volume</td>
</tr>
</tbody>
</table>

4. First-aid measures

**First Aid Measures**
For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.

**Inhalation**
Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.

**Ingestion**
Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.

**Skin**
Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.

**Eye contact**
Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance. Remove contact lenses, if present and
Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Treat according to symptoms.

Choose extinguishing media to suit the burning material.

Full protective clothing and self-contained breathing apparatus.

Keep up wind. Do not allow washings to reach sewage or effluent systems.

May emit toxic fumes of hydrogen chloride or phosgene if material is involved in fires or subjected to extreme heat. Breathable air apparatus may have to be worn if material is involved in fires in confined spaces.

Location Certificate: Not applicable

Hazardous Atmosphere Zone: Not applicable

Number of Fire Extinguishers: Not applicable

Wear protective clothing. Clear area of unprotected personnel. Contain liquid spill and absorb with sand, soil or absorbent granules. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.

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

Prevent from entering drains, waterways or sewers.

This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

Avoid skin and eye contact and inhalation of spray mist.

APPROVED HANDLER: This product must be under the control of an approved handler if applied in a wide dispersive manner, or used by a commercial contractor.

TRACKING: Is not required

RECORD KEEPING: Records of use as described in the NZS 8409 Management of Agrichemicals must be kept.

BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.

Keep out of reach of children.

Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Storage must be in accordance with NZS 8409 Management of Agrichemicals.

Stores containing 100L of AGRITONE 750 require secondary containment and are subject to signage, and more than 100L require emergency response plans.

Always read the label and any attached leaflet before use.

Aggregate Storage Volume Thresholds:

When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

No exposure limits have been set for this product.

WES TWA for dimethylamine = 10ppm and 18mg/m³

No special ventilation required. When working with the concentrate in confined spaces, it is recommended that forced ventilation be used to remove traces of dimethylamine vapour from the working atmosphere.

When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.

Do not eat, drink or smoke while using.
9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Dark brown liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>'Ammonia like' odour</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt;100°C (water)</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.18g/mL</td>
</tr>
<tr>
<td>pH</td>
<td>9 - 10</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>MCPA (DMA salt) considered practically non-volatile</td>
</tr>
<tr>
<td>Flammability</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Other Information</td>
<td>(SL) Soluble concentrate</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

- **Chemical Stability**: Stable under normal conditions of handling and storage.
- **Possibility of hazardous reactions**
  - May react violently with strong oxidising material such as chlorine.
  - If strong alkalis such as caustic soda are added, dimethylamine vapour will be released. Dimethylamine is moderately toxic, LD50 (oral, rat) 700 mg/kg and a TLV of 10ppm (TWA). Dimethylamine vapour is heavier than air and flammable.
  - The addition of strong acids will precipitate MCPA acid as a solid. This will reduce the efficacy of the herbicide and cause blockages of the spray equipment.
- **Hazardous Polymerization**: Not known to occur.

11. Toxicological Information

**Toxicity Information**

- MCPA TECHNICAL:
  - MCPA is considered to be of moderate toxicity to man. There have been very few reported acute toxic effects on users over many years. Several deaths have been recorded, but all of these have been deliberate suicide, generally using the sodium salt.
- LD50 (rats): 700 - 1,160mg/kg for MCPA technical
- LD50 (mouse): 439mg/kg for MCPA technical
- LD50 (rats): >4,000 mg/kg for MCPA technical

**Acute Toxicity - Oral**

- LD50 (rat, 4h): >6.36mg/L for MCPA technical

**Acute Toxicity - Dermal**

**Acute Toxicity - Inhalation**

**Ingestion**

- The concentrate is considered harmful if swallowed.
- The spray solution is not considered a significant hazard due to the relatively low toxicity of the diluted product.
- Not considered a serious hazard because MCPA (dimethylamine salt) is practically non-volatile; however, inhalation of spray mists should be avoided.
- The concentrate may cause irritation.

**Eye**

- The concentrate may cause severe irritation and probable damage if contact is prolonged.

**Chronic Effects**

- Liver and kidney damage has been noted in laboratory animals but only after excessive doses.
- Acute Over Exposure: Headache, nausea and vomiting with possible twitches and spasms in extreme cases.

**Other Information**

- The Australian Acceptable Daily Intake (ADI) for MCPA for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1.1 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, Office of Chemical Safety, 'ADI List', March 2013).
12. Ecological information

Persistence and degradability
In soil, MCPA is degraded to 4-chloro-2-methylphenol, followed by ring hydroxylation and ring opening. DT50 <7 days after initial 'lag phase'. Duration of residual activity in soil c.3-4 months, following an application rate of 3kg/ha.

Environmental Fate
In animals, MCPA is rapidly absorbed and excreted almost exclusively in the urine, with only a small proportion in the faeces.

Bioaccumulative Potential
MCPA is not bioaccumulative.

Environmental Protection
Do not contaminate dams, rivers or streams with pesticide or used containers.

13. Disposal considerations

Dispose of product only by using according to the label, or at an approved landfill.

14. Transport information

It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.

UN proper shipping name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (MCPA, 75%)

UN number
3082

Hazchem Code:
2X

Packaging Method
-

Packing Group
III

EIWG Number
47

IMO Marine Pollutant
Yes. Environmentally Hazardous Substance mark required.

IMO Marine Pollutant Code
F-A, S-F

Other Information
Do not carry this product on a passenger service vehicle.

Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

15. Regulatory information

Registered pursuant to the ACVM Act 1997, No. P7493
See www.foodsafety.govt.nz for registration conditions

 Approved pursuant to the HSNO Act 1996, Approval Code HSR000381
See www.epa.govt.nz for approval controls.

Hazard Rating Systems
NFPA/HMIS: 2-1-1

Hazard Category
HARMFUL * CORROSIVE * ECOTOXIC - keep out of reach of children
16. Other Information

Date of preparation or last revision of SDS: November 2013

Contact Person/Point:
IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE
24Hr Tollfree Emergency No: 0800 651 911
24Hr Emergency No: National Poisons Centre Phone: 0800 764 766
5 yearly review carried out. Various changes and updates made to document.

Revisions Highlighted:
...End Of MSDS...