

# SAFETY DATA SHEET



## Magister<sup>®</sup> CS

Date of Issue: 31 November 2007

### 1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

**Chemical name of active ingredient(s):** Clomazone

**Recommended use:** Herbicide

**Supplier:** Elliott Technologies Limited  
Unit 5, 42 Ormiston Road  
East Tamiki  
Phone 0800 100 325

**Emergency telephone number:** 0800 Poison (0800 764 766) 24 Hours

### 2. HAZARDS IDENTIFICATION

**Hazard Classification:** Ecotoxic - 9.1B, 9.2A

**Required identification Details:**

**MOST IMPORTANT HAZARDS :**  
Adverse human health effects : No specific risk when handled in accordance with good occupational hygiene and safety practice, to our knowledge  
Environmental effects : Presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with.  
Physical and chemical hazards :  
- Fire or explosion : Slightly combustible. May support combustion at elevated temperatures  
Burning and thermal decomposition may form toxic by-products

**Deleted: Approved Handler Applies!**  
This product must be tracked throughout its lifecycle.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/preparation Information on hazardous ingredients**

Common name	CAS No	%
Clomazone	81777-89-1	36
Sodium nitrate	7631-99-4	
Calcium chloride	10043-52-4	

### 4. FIRST-AID MEASURES

**Description of necessary first aid measures:**

**Effects and symptoms**

**First-aid measures**

Effects from overexposure from either swallowing, inhaling or coming into contact with the eyes or skin. Symptoms of overexposure include decreased activity, tearing eyes, bleeding from the nose and inco-ordination.

**Inhalation:**

Remove to fresh air. If breathing difficulty or discomfort

occurs and persists.

<b>Ingestion:</b>	Do not induce vomiting and do not give liquids of any kind to the person. Never give anything by mouth to an unconscious person. See a medical doctor immediately
<b>Skin contact:</b>	Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.
<b>Eye contact:</b>	Flush with water for at least 15 minutes. If irritation occurs and persists, contact a medical doctor.
<b>Notes to a physician:</b>	This product has low oral, dermal and inhalation toxicity. It is moderately irritating to the eyes and slightly irritating to the skin. Direct contact with eyes may produce corneal damage, especially if not washed out immediately. Inert ingredients contain xylene-range aromatic solvents which may produce a chemical pneumonitis; therefore, vomiting is not recommended, and lavage requires intubation. Activated charcoal and cathartics will assist gastrointestinal tract evacuation.

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## 5. FIRE-FIGHTING MEASURES

<b>HAZCHEM Code:</b>	3[Y]
<b>Extinguishing media :</b>	Suitable extinguishing media : Foam Carbon dioxide (CO <sub>2</sub> ) Powders
<b>Hazardous thermal (de)composition products:</b>	Specific hazards : Toxic fumes are released Specific fire fighting methods : Isolate fire area. Evacuate downwind
<b>Protection of fire-fighters:</b>	Do not dispose of fire-fighting water in the environment Do not attempt to fight the fire without suitable protective equipment Do not breathe fumes Protection of fire-fighters : Self-contained breathing apparatus Complete protective clothing

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## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions:</b>	Avoid contact with skin and eyes Do not breathe vapours. Do not attempt to intervene without a suitable protective equipment. - Disposal : Dispose of contaminated materials in accordance with current regulations
<b>Environmental precautions:</b>	Do not allow product to spread into the environment Contain the spilled material by bunding
<b>Methods for cleaning up:</b>	- Neutralization : Absorb spillage with: - inert absorbent material. - earth or sand

Neutralize non-recoverable product with :  
- a 20 % solution of potassium hydroxide in methanol  
Cover the treated area with plastic and let stand for 24 h.  
Remove the  
covering and place in a drum for a later disposal.  
- Cleaning/decontamination : Wash with plenty of water and  
detergent  
To clean and

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## 7. HANDLING AND STORAGE

**Handling:** Technical measures : Vapour extraction at source  
Precautions : Avoid any direct contact with the product  
Work in a well-ventilated area

**Storage:** - Recommended : Store :  
- in a cool, dry area  
- in a well-ventilated area  
- protected from frost  
- away from food and drinks and animal foodstuffs  
- out of reach of children.

**Packaging materials:** 1,5 litre HDPE plastic bottle

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace Exposure Guidelines

**Workplace exposure standards:** NOT ESTABLISHED NZ

**Exposure Standards outside:  
The workplace:** Not available

### Engineering measures

**Exposure control measures:** Ensure good ventilation of the work station  
Extraction to remove vapours at their source.

### Personal Protective Equipment

**Detail specifications for equipment:**

**Respiratory system:** If the ventilation is suitable, it is not essential to wear  
respiratory equipment.

**Skin and body:** Depending on concentrations encountered, wear overalls, and  
head covering.

**Hands:** Neoprene protective gloves or Nitrile protective gloves  
**Eyes:** For splash, mist or spray exposures, wear Safety spectacles  
**General hygiene:** Clean water should be available for washing in case of  
eye or skin contamination. Wash skin prior to eating,  
drinking or using tobacco. Shower at the end of the  
workday.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid

**Colour:** Brown

**Odour:** Slightly Aromatic

<b>pH:</b>	8.87 (Aqueous dispersion - 1 %)
<b>Vapour Pressure:</b>	N/A
<b>Vapour Density:</b>	1021 –1024 g/L
<b>Boiling Point:</b>	N/A
<b>Freezing/melting point:</b>	N/A
<b>Solubility:</b>	Disperses in water
<b>Specific gravity or density:</b>	1.16 g/cm <sup>3</sup> at 20 °C
<b>Flashpoint:</b>	>93°C
<b>Auto Ignition Point</b>	392 °C
<b>Octanol/water partition coefficient:</b>	Clomazone :2.5
<b>Explosion properties:</b>	Not Explosive
<b>Oxidation properties:</b>	Not an Oxidising Agent

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## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under
<b>Conditions to avoid:</b>	Excessive heat and fire
<b>Materials to avoid:</b>	None known
<b>Hazardous decomposition Products:</b>	Carbon monoxide and/or carbon dioxide, oxides of nitrogen, chlorine and hydrogen chloride.
<b>Hazardous polymerization:</b>	Will not occur
<b>Specific Data:</b>	
<b>Hazardous reactions :</b>	

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## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity – Oral :** LD 50 oral (Rat) : > 5000 mg/kg  
Local effects :  
Sensitization :

**Acute toxicity - Dermal :** LD 50 skin (Rat) : > 5000 mg/kg

**Acute toxicity – Inhalation: technical a.i.** LC<sub>50</sub> 4.47 mg/l (4h) (rat)

**Skin irritation :** Not irritating to rabbit skin

**Eye irritation:** Not irritating to rabbit eyes

**Sensitization :** Not sensitizing

### Chronic toxicity

Liver enlargement and elevated cholesterol levels have been noted in studies on laboratory animals, where clomazone was ingested in large doses over the life span of the animals. In studies with laboratory animals, clomazone did not cause reproductive or teratogenic effects or carcinogenicity. ADI (Acceptable Daily Intake) for humans is 0.1 mg/kg bw/day. The toxicity of the product may also be attributed to the solvent it contains which may cause central nervous system depression. Additive effects may occur with mixtures of solvents. Some solvents have irritating effects on the eyes and skin.

**Reproduction toxicity:** Studies in laboratory animals did not cause reproductive toxicity.

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicity Aquatic:** Harmful to aquatic organisms. Risk of bioaccumulation in an aquatic species is low.  
Log Octanol/Water Partition Coefficient: 2.5  
48hr LC50 (Daphnia magna): 5.2 mg/L.  
96hr LC50 (rainbow trout): 19 mg/L.  
96hr LC50 (bluegill sunfish): 34 mg/L.

**Birds** Oral LD50 (mallard duck): >2,510 mg/kg.  
Dietary LD50 (mallard duck): >5,620 ppm in diet (8 days).

**Water** Field studies showed that clomazone does not significantly leach below 15cm in soil and is, therefore, not expected to enter groundwater.

**Persistence/degradability Soil** Clomazone is degraded in soils under aerobic and anaerobic conditions with half lives ranging between 1 to 4.5 months depending upon soil conditions.

**Bioaccumulative potential :** Low, log Pow of 2.5, measured bioconcentration factor (BCF) of 27 -40.

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## 13. DISPOSAL CONSIDERATIONS

**Methods of disposal :** Triple rinse container and add residue to spray tank. Burn if permitted and circumstances, especially wind direction permit, otherwise bury in landfill.

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## 14. TRANSPORT INFORMATION - International transport regulations

**UN number:** N/A  
**Class or Division:** N/A  
**Packing Group:** N/A  
**Marine Pollutant:** N/A  
**Proper shipping name :** N/A  
**INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):** N/A

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## 15. REGULATORY INFORMATION

**ACVM Registered Number:** **P4142**  
**HSNO Approval Code:** **HSR0611222**

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## 16. OTHER INFORMATION

**Additional information:** **Original Issue Date:** 31 November 2007  
**Revision Date:** N/A  
**Replaces:** N/A

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**Disclaimer EXCLUSION OF LIABILITY: PLEASE READ**

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