

MATERIAL SAFETY DATA SHEET

eChem (Australia) Pty Ltd

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A.C.N. 089 133 095

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Emergency Contact:
1800 033 111

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: eChem Emaz Herbicide

Full Product Name: eChem Emaz Herbicide.
Other Names: Imazapic. Group B Herbicide.
Use: A Herbicide for fallow, sugar cane and peanuts.
Company: eChem (Australia) Pty Ltd
Address: 13833 New England Highway, Cambooya Qld 4358
ACN/ABN: 089 133 095
Telephone Number: 07 4696 1054 **Fax Number:** 07 4696 1057
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SECTION 2 HAZARDS IDENTIFICATION

**Not classified as hazardous according to criteria of Safe Work Australia.
Not classified as a Dangerous Good according to the ADG Code**

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL	CAS NUMBER	PROPORTION
Imazapic	104098-48-8	240 g/L
Other ingredients (including water) determined not to be hazardous		to 100%
Trace quantities of impurities are possible.		

SECTION 4 FIRST AID MEASURES

FIRST AID

Ingestion: If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 13 1126.
Eye contact: If in eyes, immediately flush with copious amounts of water. If irritation occurs and persists, obtain medical attention.
Skin contact: Remove contaminated clothing. Wash skin with soap and water. If skin irritation persists, seek medical advice.
Inhalation: Remove to fresh air and observe until recovered.

Advice to Doctor: Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing media: eChem Emaz is not flammable. Choose extinguishing media to suit burning material. Prevent run off from entering drains or waterbodies.

Hazards from combustion products: Considered a low risk due to the water in the product. However, if the water is evaporated, the product may be combustible and when burned will produce oxides of carbon and nitrogen. Will not polymerise.

SECTION 5 FIRE FIGHTING MEASURES (Continued)

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated.

SECTION 6 ACCIDENTIAL RELEASE MEASURES

Emergency procedures / Material and methods for containment and cleanup procedures: Wear protective equipment to prevent skin contamination. In the case of spillage, contain and absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons.

SECTION 7 HANDLING AND STORAGE

Precautions for safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Wear protective equipment to prevent skin and eye contamination. When opening the container wear elbow length PVC gloves.

Conditions for safe Storage: Store in the closed, original container in a well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. Do not re-use container for any purpose. eChem Emaz is not classified as Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines:**

No exposure limit has been established for this material by Safe Work Australia.

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Use in ventilated areas - generally natural ventilation is sufficient. Keep containers closed when not in use. No special engineering controls are required.

Personal Protective equipment (PPE):

Skin: When opening the container wear elbow length PVC gloves. Wash thoroughly before smoking, eating or using toilet facilities. Wash hands after use.

Eye Protection: Where potential for splash, spray or mist exists, wear chemical protective goggles or a full face shield. Avoid contact with the eyes.

Respiratory Protection: Generally not required. Use of a respirator may be required in certain circumstances to protect from inhalation of spray mist.

Personal Hygiene: Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Dark yellow watery liquid.
Odour:	Characteristic odour.
Boiling point:	Not known.
Freezing point:	Not known.
Specific Gravity:	1.08 ± 0.05.
Solubility in Water:	soluble in water.
pH:	6-7
Flammability:	Not flammable.
Corrosive hazard:	Not corrosive.
Flashpoint (°C):	Not flammable.
Flammability Limits (%):	Not flammable.
Poisons Schedule:	Not a scheduled poison.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not leave in direct sunlight for long periods.

Incompatible materials: Avoid strong oxidizing agents.

Hazardous decomposition products: If the water is evaporated the product is burned it will produce oxides of carbon and nitrogen.

Hazardous reactions: No particular reactions to avoid.

SECTION 11 TOXICOLOGICAL INFORMATION

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure. Irritating to the eyes and skin.

Potential Health Effects:**ACUTE EFFECTS**

Swallowed: The estimated Acute Oral LD₅₀ (rat) > 5000 mg/kg.

Eye: This product may be a slight irritant to the eyes.

Skin: This product may be a slight irritant to the skin. The estimated LD₅₀ > 5000 mg/kg.

Inhaled: Inhalation of mists or sprays may produce respiratory irritation. The estimated LC₅₀ is > 2.38 mg/L/4 hours.

Long Term Exposure:

No evidence of mutagenicity or teratogenicity in animal tests. In experimental animal studies with the active constituent, anaemia and liver effects were seen at high doses, while muscular effects were seen at lower doses.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology: No information is available for the product. The following information refers to the active ingredient, imazapic. Low toxicity to fish - rainbow trout, bluegill sunfish and channel catfish LC₅₀ > 100 mg/L. Algae EC₅₀ > 0.1 mg/L. Low toxicity to birds - LD₅₀ bobwhite quail > 2150 mg/kg; LD₅₀ Japanese quail > 2000 mg/kg.

Environmental Fate: Degradation is primarily by microorganisms. Half life in the field is 31-310 days, half life in water is < 8 hours - degradation by photolysis. Does not bioaccumulate (log K_{ow} = 0.393). Does not accumulate in soils or water. DO NOT contaminate streams, rivers or water courses.

SECTION 13 DISPOSAL CONSIDERATIONS**Spills and Disposal:****1) After intended use (disposal of empty containers):**

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. Empty containers and product should not be burnt. For help with disposal of empty containers contact DrumMuster <http://www.drummuster.com.au> for details for your area.

2) After spill or accident

Clear area of all unprotected personnel. Wear protective clothing and equipment including chemical resistant gloves. Prevent spill from spreading or entering waterways, sewers or underground drains. Absorb spill with absorbent material such as sand clay or cat litter. Place material into an approved drum. To decontaminate spill area, tools and equipment wash with a suitable solution (e.g. organic solvent, detergent, bleach or caustic) and add the solution to the drums of waste already collected. Dispose of drummed waste and decontamination solution in accordance with the requirements of Local

SECTION 13 DISPOSAL CONSIDERATIONS (Continued)

Authorities or State Waste Management Authorities. In rural areas contact ChemClear <http://www.chemclear.com.au> for help with collection of unwanted rural chemicals.

SECTION 14 TRANSPORT INFORMATION

Transport: eChem Emaz is not classified as Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

SECTION 15 REGULATORY INFORMATION

Under the Standard for Uniform Scheduling of Drugs and Poisons (SUSDP), this product is not a scheduled poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 61822.

This product is not classified as a Hazardous Substance under the criteria of Safe Work Australia. eChem Emaz is not classified as Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

SECTION 16 OTHER INFORMATION

Issue Date: 12 November 2009. (First issue).

Key to abbreviations and acronyms used in this MSDS:

ADG Code	Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
Carcinogen	An agent which is responsible for the formation of a cancer.
Genotoxic	Capable of causing damage to genetic material, such as DNA.
Hypotonia	A condition of abnormally low muscle tone.
Mutagenic	Able to produce a mutation (a change in the genetic material of cells).
Neurotoxicity	An adverse change in the structure or function of the nervous system.
NOHSC	National Occupational Health and Safety Commission.
Oedema	Accumulation of fluid in tissues.
PPE	Personal protective equipment.
Teratogen	An agent capable of causing abnormalities in a developing foetus, that is causing birth defects.
STEL	Short Term Exposure Limits
TWA	The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.
Safe Work Australia:	Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC)).

References

1. "Search Hazardous Substances". HSIS Safe Work Australia website. (2009).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

End MSDS