

Material Safety Data Sheet

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Infosafe No.	3NUF6	Issue Date : June 2007	ISSUED by CRPCARE
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Product Name : **DACONATE Post Emergence Herbicide**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	DACONATE Post Emergence Herbicide
Product Code	0303
Product Type	Group K Herbicide
Company Name	Crop Care Australasia Pty Ltd (ABN 53 061 362 347)
Address	Unit 15/16 Metroplex Avenue Murarrie Queensland 4172 Australia
Emergency Tel.	1800 033 498 (24hr Australia)
Telephone/Fax Number	Tel: +61 7 3909 2000 Fax: +61 7 3909 2010
Recommended Use	For the control of annual and perennial grasses and burrs in cotton, annual and perennial grasses in sugarcane, grass weeds in couch turf, prickly pear and grasses and burrs in non-crop areas as specified in the Directions for Use table on the label.
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. HAZARDS IDENTIFICATION

Hazard Classification	HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Hazard classification according to the criteria of NOHSC. Dangerous goods classification according to the Australia Dangerous Goods Code.
Risk Phrase(s)	R23/25 Toxic by inhalation and if swallowed.
Safety Phrase(s)	S13 Keep away from food, drink and animal feeding stuffs. S2 Keep out of reach of children.
Other Information	Poisons Schedule S7 DANGEROUS POISON

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization	Liquid									
Ingredients	<table><thead><tr><th><u>Name</u></th><th><u>CAS</u></th><th><u>Proportion</u></th></tr></thead><tbody><tr><td>MSMA</td><td>2163-80-6</td><td>800 g/L</td></tr><tr><td>Other ingredients (considered non-hazardous)</td><td></td><td>0-10 %</td></tr></tbody></table>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>	MSMA	2163-80-6	800 g/L	Other ingredients (considered non-hazardous)		0-10 %
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MSMA	2163-80-6	800 g/L								
Other ingredients (considered non-hazardous)		0-10 %								

4. FIRST AID MEASURES

Inhalation	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
Ingestion	Rinse mouth and then drink plenty of water. If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient. The above first aid instructions are mandated by the Commonwealth Department of Health and Ageing via the National Drugs and Poisons Schedule. These instructions are suitable for ingestion of spray solution and small amounts of concentrate; however, if SUBSTANTIAL AMOUNTS of the concentrate have been swallowed (more than about 15ml) AND if medical assistance is more than 30 minutes away, the induction of vomiting should be CONSIDERED, preferably based on MEDICAL ADVICE if a physician can be contacted by phone. All care must be taken to prevent vomit from being inhaled. Do not give anything by mouth to a semi-conscious or unconscious person.
Skin	Wash affected areas thoroughly with soap and water.

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	Remove contaminated clothing and launder before re-use. Seek medical advice, but only after the exposed skin has been thoroughly washed.
Eye	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice.
First Aid Facilities	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
Advice to Doctor	If ingested, gastric lavage may be required. Chelation therapy with dimercaprol (BAL) or D-penicillamine has been recommended in the literature for symptomatic arsenic poisoning. Persons allergic to penicillin may suffer reaction to D-penicillamine; they should be treated with BAL only.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.
Hazards from Combustion Products	May emit toxic fumes of arsenic oxides if involved in fires or exposed to extreme heat.
Special Protective Equipment for fire fighters	Breathable air apparatus should be worn when fighting a fire in which this product is involved.
Specific Hazards	The product will not burn or burns with difficulty. Use an extinguishing media suitable for the surrounding fires.
Other Information	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

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. On-site disposal of concentrate is not acceptable. Dispose of at a landfill in accordance with local regulations.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8. If product has dried out and the possibility of dust generation exists, wear a suitable respirator.
Environmental Precautions	Prevent from entering drains, waterways or sewers.

7. HANDLING AND STORAGE

Conditions for Safe Storage	Store in the closed, original container in a dry, well ventilated area, as cool as possible. Do not store for prolonged periods in direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.
Other Information	Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	NOHSC has set the following exposure standard for arsenic and soluble compounds (as As) : TLV (TWA) 0.05 mg/m ³ , STEL -.
Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protective Equipment	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.
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.

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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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Liquid
Appearance Pink liquid.
Odour Fruity odour.
Solubility in Water Soluble in water.
Vapour Pressure 0.01 mPa @ 25°C
Octanol/Water Partition Coefficient Kow Log P is <0
Flammability Not flammable
Other Information pKa is 9.02

10. STABILITY AND REACTIVITY

Incompatible Materials Avoid contact of the concentrate with strong acids and bases.

11. TOXICOLOGICAL INFORMATION

Inhalation Breathing in high concentrations of mists or aerosols of this material may cause nausea and irritation of the nose, throat and respiratory tract.
Ingestion Ingestion of the concentrate in relatively large amounts may result in nausea, vomiting, abdominal pain, diarrhoea and headache followed by dizziness, stupor, convulsions, paralysis and death.
Skin Prolonged contact with the concentrate may cause irritation.
Eye May irritate the eyes.
Chronic Effects Chronic feeding studies in animals do not indicate any cumulative toxicity and show that the compound is neither a carcinogen nor a teratogen.
Carcinogenicity Data indicates no carcinogenic effects.
Acute Toxicity - Oral LD50 (rat) 900 mg/kg for monosodium methylarsonate (MSMA)
Acute Toxicity - Inhalation LC50 (rat) (4hr) >20 mg/l
Eye Irritation Mild eye irritant.
Skin Irritation Mild skin irritant.
Other Information The Australian Acceptable Daily Intake (ADI) for MSMA for a human is 0.0005 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.5 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, September 2006).

12. ECOLOGICAL INFORMATION

Persistence / Degradability Soil half life for MSMA is 55 days, soil half life for the primary metabolite is 88 days.
Other Precautions Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environ. Protection Spray drift should be avoided, read the label for more information.
Acute Toxicity - Fish The following is data for the active ingredient, MSMA.
LC50 (96 hr) for rainbow trout is >167 mg/l.
LC50 (96 hr) for bluegill sunfish is >51 mg/l.
Acute Toxicity - Daphnia LC50 (48hr) for daphnia is 77.5 mg/l.
Acute Toxicity - Algae EC50 (5d) for Selenastrum is 7.6 mg/l.

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Product Name : **DACONATE Post Emergence Herbicide**

Acute Toxicity - Other Organisms Birds: Not toxic to birds. LD50 for quail is 425 mg/kg
Bees: Not toxic to bees. LD50 68 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 (ChemClear®).

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 recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, puncture or shred and bury containers in local authority landfill. 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

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

Poisons Schedule S7

Packaging & Labelling DANGEROUS POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Hazard Category Toxic

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

Literature References Cohen et al, 2006, Methylated arsenicals: the implications of metabolism and carcinogenicity studies in rodents to human risk assessment. Crit. Rev Toxicol. 2006 Feb; 36(2):99-133.

Revisions Highlighted First Issue

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