



Material Safety Data Sheet

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Infosafe No. NU026 Issue Date : December 2007 ISSUED by NUFARM

Product Name : L.V.E. MCPA Selective Herbicide

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name L.V.E. MCPA Selective Herbicide
Product Code 0568
Product Type Group I Herbicide
Company Name NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address 103-105 Pipe Road Laverton North
Victoria 3026 Australia
Emergency Tel. 1800 033 498 (24hr Australia)
Telephone/Fax Number Tel: +61 3 9282-1000
Fax: +61 3 9282-1001
Recommended Use For selective control of certain weeds in agricultural crops as listed 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) R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R65 Harmful: may cause lung damage if swallowed.
Safety Phrase(s) S13 Keep away from food, drink and animal feeding stuffs.
S2 Keep out of reach of children.
S36 Wear suitable protective clothing.
S37 Wear suitable gloves.
S46 If swallowed, seek medical advice immediately and show this container or label.
Other Information Poisons Schedule S6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
	MCPA (present as the 2-ethyl hexyl ester)	94-74-6	500 g/L
	Heavy aromatic solvent naphtha	64742-94-5	10-30 %
	Other ingredients (considered non-hazardous)		Balance

4. FIRST AID MEASURES

Inhalation Remove affected person to fresh air until recovered.
If symptoms develop or persist, seek medical advice.
Ingestion 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.
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.



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First Aid Facilities Seek medical advice.
If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.

Advice to Doctor Treat symptomatically.
If vomiting occurs, solvent present may cause pulmonary pneumonitis.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media Water fog, foam, carbon dioxide or dry chemical.

Hazards from Combustion May emit toxic fumes of hydrogen chloride or phosgene if involved in fires or exposed to extreme heat.

Products

Special Protective Equipment for fire fighters Breathable air apparatus should be worn when fighting a fire in which this product is involved.

Decomposition Temp. >150°C

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.
Dispose of at a landfill in accordance with local regulations.
On-site disposal of concentrate is not acceptable.

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

Clean-up Methods - Large Spillages Place damaged containers in recovery bins (if available) and return to manufacturer.

Environmental Precautions This product is a herbicide and spills can damage crops, pastures and desirable vegetation.
Use earthen bunds or absorbent bunding to prevent spreading of spillage.

7. HANDLING AND STORAGE

Precautions for Safe Handling Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers.

Conditions for Safe Storage Store in the closed, original container in a cool, well ventilated area.
Do not store for prolonged periods in direct sunlight.

Other Information Do not use on or insituations where damage to susceptible crops or plants such as cotton, tobacco, tomatoes, flowers, vines, fruit trees or other susceptible crop plants may result from direct application or drift.
Sprayed weeds may become more palatable to stock and a higher intake of some weeds may result in stock poisoning and death from causes such as nitrate poisoning. Care should be taken especially where capeweed, Paterson's curse and variegated thistles predominate in the pasture.
Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards No exposure standards have been set for this product or the active ingredients.
The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m³; 17ppm TWA, as total hydrocarbon.

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 Clear, brown liquid
Odour Characteristic solvent odour
Decomposition Temperature >150°C
Boiling Point 182-202°C (for solvent present)
Solubility in Water Forms an emulsion in water.
Specific Gravity 1.040
Vapour Pressure 0.267 mPa @ 18°C (for MCPA 2EHE)
Vapour Density (Air=1) >1 (for solvent present)
Octanol/Water Partition Coefficient Kow Log P is >3.0 for MCPA 2EHE
Flash Point 92°C
Flammability Combustible liquid C1.

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions.
Hydrolyses at pH >7.
Hazardous Reactions Keep away from strong oxidising agents.
Hazardous Polymerization Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Inhalation When applying the product as a spray avoid breathing in spray mist.
High vapour concentrations of the solvent while handling the concentrate are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, and may have other central nervous system effects.

Ingestion Ingestion of the concentrate in relatively large amounts can result in headache, nausea, lethargy, motor weakness and incoordination.

Skin Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.
Prolonged contact with the concentrate may result in absorption of MCPA in harmful amounts.

Eye May irritate the eyes.
Prolonged contact with the concentrate may cause damage to the eye.

Chronic Effects Chronic Overexposure: Repeated absorption of relatively large amounts of MCPA presents a risk to the liver and kidneys.

Reproductive Toxicity Data indicates no reproductive effects.
Data indicates no teratogenic effects.

Mutagenicity The weight of evidence indicates that MCPA does not present a mutagenic risk.

Carcinogenicity The weight of the evidence is that MCPA is not carcinogenic.

Acute Toxicity - Oral LD50 (rat) 1300 mg/kg for MCPA 2EHE

Acute Toxicity - Dermal LD50 (rat) >2000 mg/kg for MCPA 2EHE

Acute Toxicity - Inhalation LC50 (rat) (4hr) >4.5 mg/l for MCPA 2EHE

Eye Irritation Mild eye irritant.

Skin Irritation Mild skin irritant.



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Skin Sensitisation Product is not a skin sensitiser.

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, 'ADI List', TGA, September 2006).

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.

Acute Toxicity - Fish MCPA 2EHE has very low water solubility (0.1 mg/l) and rapidly hydrolyses in natural waters. The following data is for the hydrolysis product: MCPA acid
LC50 (96 hr) for rainbow trout is 50 mg/l.
LC50 (96 hr) for fathead minnow is >3.2 mg/l.

Acute Toxicity - Daphnia EC50 (48hr) for daphnia is >190 mg/l for MCPA acid.

Acute Toxicity - Other Organisms Birds: Not toxic to birds. LD50 for bobwhite quail is >2250 mg/kg
Not toxic to bees.

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 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.
Returnable containers: empty contents fully into application equipment.
Replace cap, close all valves and return to the point of supply for refill or storage.

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 S6

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

Hazard Category Harmful

AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION



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Product Name : **L.V.E. MCPA Selective Herbicide**

**Date of preparation
or last revision of
MSDS** revised 11/12/2007

Contact Person/Point Normal Hours: Mr Volker Maier Phone: +61 3 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

**Revisions
Highlighted** The MSDS was reviewed. Minor changes were made to the information.

...End Of MSDS...