



Material Safety Data Sheet

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Infosafe No. 3NU3F Issue Date: June 2004 ISSUED by NUFARM

Product Name : **PARAGON® Herbicide**

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name PARAGON® Herbicide
Product Code 0704
Product Use For the control of certain broadleaved weeds in winter cereals as indicated in the Directions for Use table.
Company Name NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address 103-105 Pipe Road Laverton North
Victoria 3026 Australia
Emergency Tel. 24hr 1800 033 498
Telephone/Telex Number Tel: (03) 9282-1000 Fax: (03) 9282-1001
Product Type Group F I Herbicide
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. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
	MCPA present as the ethyl hexyl ester	29450-45-1	500 g/L
	Picolinafen	137641-05-5	50 g/L
	Hydrocarbon solvent	64742-94-5	<10%

3. HAZARDS IDENTIFICATION

Harmful by inhalation, in contact with skin and if swallowed.

Other Information Poisons Schedule 6

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.
The above first aid instructions are mandated by the Commonwealth Department of Health and Aged Care 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 20ml or one tablespoon) 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.
Remove contaminated clothing and launder before re-use.
If irritation persists, seek medical advice.

Eye If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.
Seek medical advice if irritation develops or persists.



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

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

5. FIRE FIGHTING MEASURES

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

Avoid using large volumes of water which would spread the product.

Hazardous Although material is not flammable, the concentrate is combustible.

Combustion Products If involved in a fire, it will emit oxides of carbon, oxides of nitrogen and possibly hydrogen chloride, phosgene, hydrogen fluoride or fluorinated hydrocarbons.

Emergency Action in case of Fire If exposed to fire, keep container cool by spraying with water.

Protective Equipment Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.

Other Information Prevent 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.

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

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.

Prevent from entering drains, waterways or sewers.

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

If large liquid spills occur, attempt to recover as much spilt material from sumps and banded areas before absorbing remaining material into vermiculite or other absorbent.

7. HANDLING AND STORAGE

Storage Store in the closed, original container in a cool, well ventilated area.

Do not store for prolonged periods in direct sunlight.

Other Information Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limits No exposure standard for this product has been set, however, an exposure standard has been recommended by the supplier for the solvent at 143ppm or 1200 mg/m³.

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.

Eng. Controls Use in a well ventilated area only.

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.

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. By 1st September, 2005 all users must have received such training.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Brown liquid



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Odour Slightly aromatic odour
Solubility in Water Forms an emulsion in water.
Specific Gravity (H2O=1) 1.02 - 1.08
pH Value 3 - 5
Volatile Component <8%
Flash Point >105°C
Flammability Combustible liquid C1.
Ignition Temperature 260°C

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions.
Hazardous Polymerization Hazardous polymerisation is not possible.
Hazardous Reaction Keep away from strong oxidising agents.
Violent reactions between this product and oxidising agents are possible.

11. TOXICOLOGICAL INFORMATION

Toxicology Information No harmful effects are expected if the precautions on the label and this MSDS are followed.
Inhalation Breathing vapour can result in headaches, dizziness and possible nausea.
Ingestion Ingestion of the concentrate in relatively large amounts can result in headache, nausea, lethargy, motor weakness and incoordination.
If aspirated into the lung, e.g. from vomiting, the presence of hydrocarbon solvent may result in chemical pneumonitis or other lung damage.
Skin Prolonged contact with the concentrate may result in absorption of MCPA 2EHE in harmful amounts.
Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.
Eye The concentrate may cause irritation after short contact with the eyes, but permanent damage is not anticipated.
Chronic Effects Regular exposure may result in effects on liver and kidneys.
Acute Toxicity - Oral LD50 (rat) >1768 mg/kg for the formulated product
Acute Toxicity - Dermal LD50 (rat) >4000 mg/kg for the formulated product
Acute Toxicity - Inhalation LC50 (rat) (4hr) >5.18 mg/l for the formulated product
Eye Irritation Moderate eye irritant.
Skin Irritation Mild to moderate skin irritant.
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, August 2003).
ADI for picolinafen is 0.007 mg/kg/day, NOEL 1.4 mg/kg/day.

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.



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Acute Toxicity - Fish LC50 (96 hr) for rainbow trout is 3.2 mg/l for MCPA 2EHE
LC50 (96 hr) for rainbow trout is 0.281 mg/l for picolinafen
The acute toxicity to fish of MCPA 2EHE is above its solubility in water.

Acute Toxicity - Daphnia LC50 (48 hr) for daphnia is >190 mg/l for MCPA acid.
LC50 (48 hr) for daphnia is 0.612 mg/l for picolinafen.

Acute Toxicity - Other Not toxic to bees.

Organisms Not toxic to birds.

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 (ChemCollect).

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.
Returnable containers: empty contents fully into application equipment. Replace cap, close all valves and return to the point of supply for refill or storage. If on-site container disposal is necessary, triple rinse empty container with water, add rinsate to the spray tank. Puncture top, sides and bottom, crush and bury in an approved landfill or bury with at least 500 mm of soil cover away from pasture and crop areas, water supplies and houses.
Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

U.N. Number None Allocated
DG Class None Allocated
Hazchem Code None Allocated
Packing Group None Allocated
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

Risk Phrase R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
Safety Phrase S13 Keep away from food, drink and animal feeding stuffs.
S2 Keep out of reach of children.
S46 If swallowed, seek medical advice immediately and show this container or label.

Poisons Schedule S6
Hazard Category Harmful
Packaging & Labelling POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

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

16. OTHER INFORMATION

® Registered trademark of BASF



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Contact Person/Point	Normal Hours: Mr Volker Maier	Phone: (03) 9282 1000
	After Hours: Shift Supervisor	Phone: 1800 033 498

Revisions Highlighted First Issue

...End Of MSDS...