



# Material Safety Data Sheet

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Infosafe No. 3NU3F Issue Date : May 2007 ISSUED by NUFARM

Product Name : **PARAGON® Herbicide**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name** PARAGON® Herbicide  
**Product Code** 0704  
**Product Type** Group F I Herbicide  
**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/Fax Number** Tel:  
(03) 9282-1000  
Fax:  
(03) 9282-1001  
**Recommended Use** For the control of certain broadleaved weeds in winter cereals as indicated 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.  
**Safety Phrase(s)** 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.  
**Other Information** Poisons Schedule S6

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Characterization** Liquid

<b>Ingredients</b>	<b>Name</b>	<b>CAS</b>	<b>Proportion</b>
	MCPA present as the ethyl hexyl ester	94-74-6	500 g/L
	Picolinafen	137641-05-5	50 g/L
	Hydrocarbon solvent	64742-94-5	<10%

## 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 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 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



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**Skin** anything by mouth to a semi-conscious or unconscious person.  
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.

**First Aid Facilities** 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.

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## 5. FIRE FIGHTING MEASURES

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

**Hazards from Combustion Products** Avoid using large volumes of water which would spread the product.  
Although material is not flammable, the concentrate is combustible.  
If involved in a fire, it will emit oxides of carbon, oxides of nitrogen and possibly hydrogen chloride, phosgene, hydrogen fluoride or fluorinated hydrocarbons.

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

**Hazchem Code** None Allocated

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

**Other Information** STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

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## 6. ACCIDENTAL RELEASE MEASURES

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**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.

**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 bunded areas before absorbing remaining material into vermiculite or other absorbent.

**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.

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## 7. HANDLING AND STORAGE

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**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** Always read the label and any attached leaflet before use.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**National Exposure Standards** 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/m<sup>3</sup>.

**Engineering Controls** Use in a well ventilated area only.

**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.  
Re-entry Period - Do not allow entry into treated areas for 24 hours after treatment. When prior entry is necessary, wear all protective clothing and



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**Hygiene Measures** chemical resistant gloves. Read the label for any other instructions.  
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

**Form** Liquid

**Appearance** Brown liquid

**Odour** Slightly aromatic odour

**Solubility in Water** Forms an emulsion in water.

**Specific Gravity** 1.02 - 1.08

**pH Value** 3 - 5

**Volatile Component** <8%

**Flash Point** 115°C

**Flammability** Combustible liquid C1.

**Auto-Ignition Temperature** 260°C

## 10. STABILITY AND REACTIVITY

**Chemical Stability** Stable under normal conditions.

**Hazardous Reactions** Keep away from strong oxidising agents.  
Violent reactions between this product and oxidising agents are possible.

**Hazardous Polymerization** Hazardous polymerisation is not 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



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term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, September 2006).

ADI for picolinafen is 0.007 mg/kg/day, NOEL 1.4 mg/kg/day.

## 12. ECOLOGICAL INFORMATION

<b>Other Precautions</b>	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
<b>Environ. Protection</b>	Spray drift can cause damage, read the label for more information.
<b>Acute Toxicity - Fish</b>	MCPA 2EHE has very low water solubility (0.01 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 rainbow trout is 0.281 mg/l for picolinafen
<b>Acute Toxicity - Daphnia</b>	LC50 (48 hr) for daphnia is >190 mg/l for MCPA acid. LC50 (48 hr) for daphnia is 0.612 mg/l for picolinafen.
<b>Acute Toxicity - Other Organisms</b>	Not toxic to bees. Not toxic to birds.

## 13. DISPOSAL CONSIDERATIONS

<b>Product Disposal</b>	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®).
<b>Container Disposal</b>	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. 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

<b>U.N. Number</b>	None Allocated
<b>DG Class</b>	None Allocated
<b>Hazchem Code</b>	None Allocated
<b>Packing Group</b>	None Allocated
<b>Storage and Transport</b>	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

## 15. REGULATORY INFORMATION

<b>Poisons Schedule</b>	S6
<b>Packaging &amp; Labelling</b>	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
<b>Hazard Category</b>	Harmful
<b>AICS (Australia)</b>	All of the components in this product are listed on the Australian Inventory



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of Chemical Substances.

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## 16. OTHER INFORMATION

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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** The MSDS was reviewed. Various changes were made to the information.

**Other Information** © Registered trademark of BASF  
...End Of MSDS...