



Infosafe No™ 3NUHU

Issue Date : August 2008

ISSUED by NUFARM

CS: 1.4.21

Product Name **Trooper® 75-D Herbicide**

Classified as hazardous

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name Trooper® 75-D Herbicide
Product Code 1260
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 the control of a wide range of annual and perennial broadleaf weeds, 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 Classified as hazardous
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) Classified as hazardous
R22 Harmful if swallowed.
R41 Risk of serious damage to eyes.
R43 May cause sensitization by skin contact.

Safety Phrase(s) S13 Keep away from food, drink and animal feeding stuffs.
S2 Keep out of reach of children.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S46 If swallowed, seek medical advice immediately and show this container or label.

Other Information Poisons Schedule S5

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
	2,4-D (present as the tri-isopropanolamine salt)	94-75-7	300 g/L
	Picloram (present as the tri-isopropanolamine salt)	1918-02-1	75 g/L
	Water		10-30 %
	Other ingredients (considered non-hazardous)		0-10 %
	Butoxy Ethanol	111-76-2	0-10 %

4. FIRST AID MEASURES

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



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Ingestion	Rinse mouth and then drink plenty of water. Do not give anything by mouth to a semi-conscious or unconscious person. 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. Seek medical advice immediately.
Advice to Doctor	Treat symptomatically.

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 hydrogen chloride or phosgene 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	Considered low risk due to water content, however upon evaporation of water the product is combustible.
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.
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 banded 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.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Do NOT spray in high winds. Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide 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.
Tank Cleaning	See label for detailed information on cleaning of spray equipment.
Other Information	Always read the label and any attached leaflet before use. Do not plant susceptible crops within 12 months of applying this product. Crops susceptible to this product include, but are not limited to: peas, lupins, lucerne, navy beans, soybeans and other legumes, cotton, fruit, hops, ornamentals, potatoes, safflowere sugarbeet, sunflower, tobacco, tomatoes, vegetables and vines.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	NOHSC has set the following exposure standard for picloram : TLV (TWA) 10 mg/m ³ , STEL -. NOHSC has set the following exposure standard for butoxy ethanol : TLV (TWA) 96.9 mg/m ³ , STEL 242. SK 'SK' notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.
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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.
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	Dark brown liquid
Solubility in Water	Soluble in water.
Specific Gravity	1.182
Vapour Pressure	Negligible
Octanol/Water Partition Coefficient	Kow Log P is 1.9 for picloram; 0.3 for 2,4-D.
Flammability	Non combustibile material.
Other Information	pKa is 2.3 for picloram; 2.76 for 2,4-D

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Incompatible Materials	Reaction of the concentrate or spray mix with acids will precipitate solid 2,4-D and largely de-activate the product and cause blockages in spray equipment.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Inhalation	The components of the product are of low volatility and no adverse effects are expected from handling the concentrate. A moderate hazard exists from inhalation of spray and care should be taken to avoid inhalation of spray mists.
Ingestion	Not a likely route of exposure. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing of large amounts may cause injury. Ingestion of the concentrate in relatively large amounts can result in headache, nausea, lethargy, motor weakness and incoordination.
Skin	Unless removed immediately, will cause irritation. Prolonged contact with the concentrate may result in absorption of 2,4-D and picloram in harmful amounts.
Eye	The concentrate will cause severe irritation and possible damage unless washed off immediately.
Chronic Effects	Liver and kidney damage has been noted in laboratory animals that have been fed excessive doses of 2,4-D.
Carcinogenicity	The weight of the evidence is that 2,4-D is not carcinogenic.
Acute Toxicity - Oral	LD50 (rat) 639 mg/kg for 2,4-D acid LD50 (rat) >3500 mg/kg for picloram potassium salt
Acute Toxicity - Dermal	LD50 (rabbit) 1600 mg/kg for 2,4-D acid LD50 (rabbit) >2000 mg/kg for picloram potassium salt
Acute Toxicity - Inhalation	LC50 (rat) (4hr) 1.79 mg/l for 2,4-D acid LC50 (rat) >1.63 mg/L for picloram potassium salt
Eye Irritation	This product is a severe eye irritant. Risk of serious damage to eyes.



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Skin Sensitisation	Prolonged and repeated skin contact may result in skin sensitisation.
Other Information	The Australian Acceptable Daily Intake (ADI) for 2,4-D 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 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 Office of Chemical Safety, 'ADI List', September 2006). ADI for picloram is 0.07 mg/kg/day, NOEL 7 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.
Acute Toxicity - Fish	LC50 (96hr) for rainbow trout is 100 mg/l for a similar 2,4-D salt LC50 (96hr) for rainbow trout is 51 mg/l for a similar picloram salt
Acute Toxicity - Daphnia	EC50 (48hr) for daphnia is >190 mg/l for a similar 2,4-D salt.
Acute Toxicity - Algae	EC50 (48hr) for daphnia is 63.8 mg/l for a similar picloram salt.
Acute Toxicity - Other Organisms	EC25 for algae is 52.6 mg/l for picloram potassium salt. Not toxic to birds. 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 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

Storage and Transport	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.
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15. REGULATORY INFORMATION

Poisons Schedule	S5
Packaging & Labelling	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Hazard Category	Harmful, Irritant
AICS (Australia)	All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION



Material Safety Data Sheet

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Date of preparation 26/08/2008

or last revision of

MSDS

Contact

Normal Hours: Mr Volker Maier

Phone: +61 3 9282 1000

Person/Point

After Hours: Shift Supervisor

Phone: 1800 033 498

Revisions

First Issue

Highlighted

Product now commercial.

...End Of MSDS...

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